



LOUISVILLE METRO HEALTH STATUS ASSESSMENT 2010

Produced by:
Office of Policy Planning and Evaluation
Louisville Metro Department of Public Health and Wellness

Overview

One of the core functions of public health is to assess the health needs of the community. This overview of health outcomes is part of our annual assessment of the Louisville Metro community and includes indicators and highlights health disparities in the following areas:

- Demographic and Social Profile
- Maternal and Child Health
- Causes of Death
- Chronic Diseases
- Behavioral Risk Factors
- Oral Health
- Mental Health
- Injury
- Childhood Lead Exposure
- Communicable Diseases

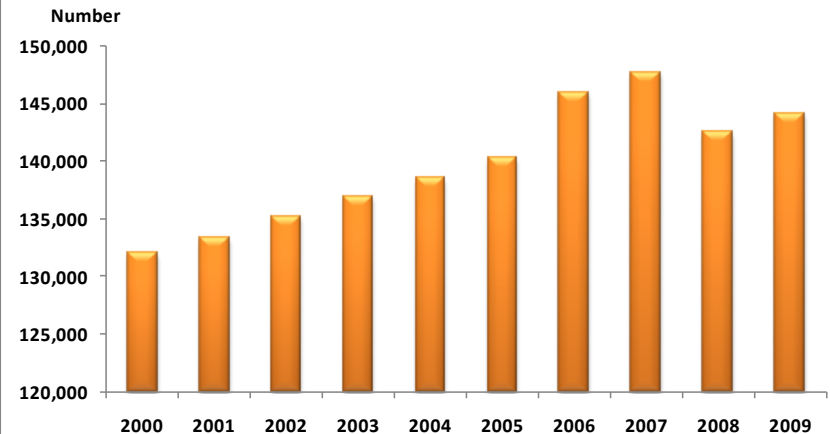
What is New?

- ◆ Environmental Services
- ◆ Air Pollution Control
- ◆ Louisville Water Company Services
- ◆ Youth Risk Behaviors
- ◆ Hospital Discharge Data
- ◆ H1N1 (Novel A Influenza)

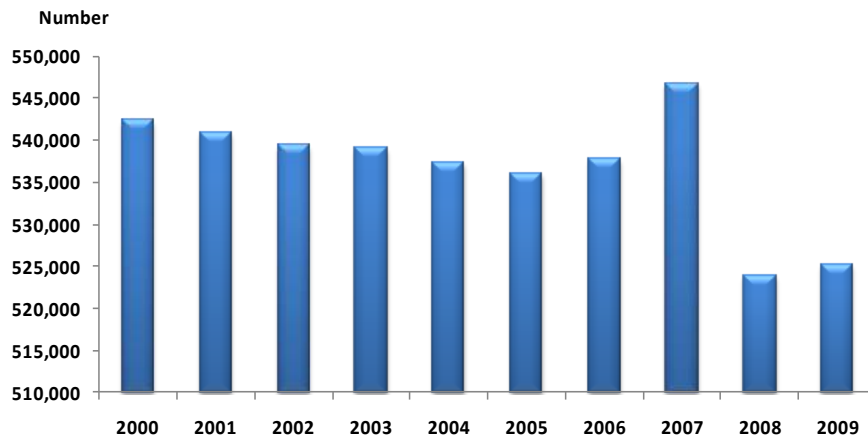
Population by Race, 2000-2009

➤ An increasing trend among all populations was observed when compared to year 2008. The White and African-American population decreased in 2008 after steady growth in previous years, while the Hispanic population has increased all through.

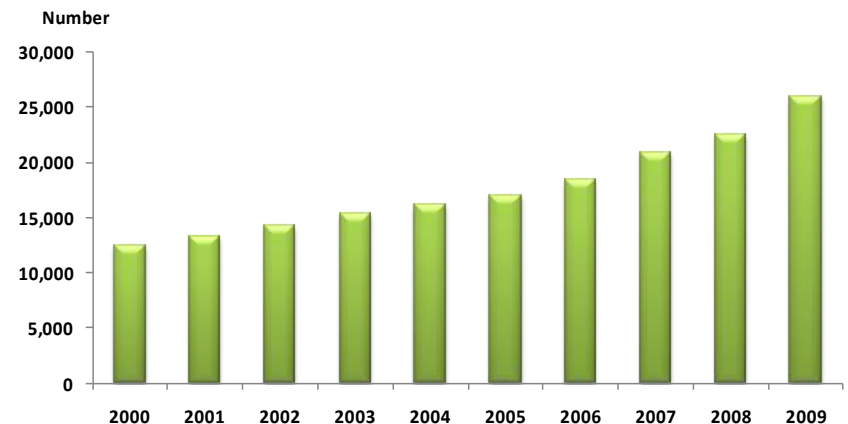
**Population Estimates of Louisville Metro
Non-Hispanic African Americans, 2000-2009**



**Population Estimates of Louisville Metro Non-Hispanic
Whites 2000-2009**

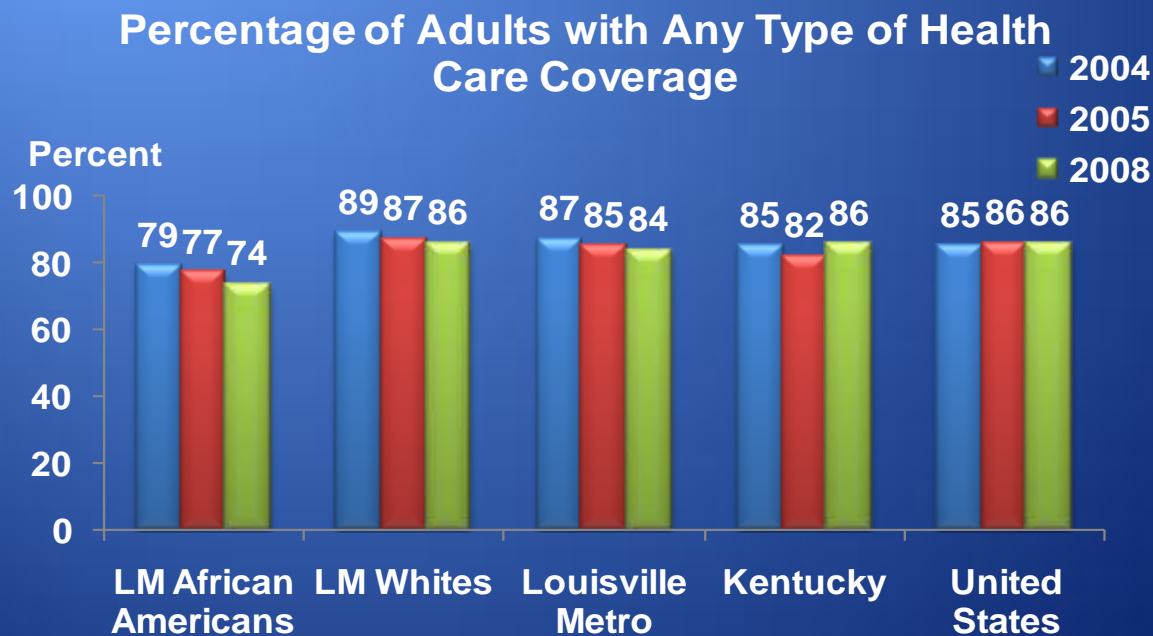


Population Estimates 2000-2009 Louisville Metro Hispanics



Health Care Coverage

- BRFSS (Behavioral Risk Factor Survey Surveillance Data) consists of self-reported data from Louisville Metro residents on several health indicators related to chronic disease.
- By 2008, 84% of LM BRFSS respondents had healthcare coverage.
- Health care coverage among African American respondents has decreased overtime.

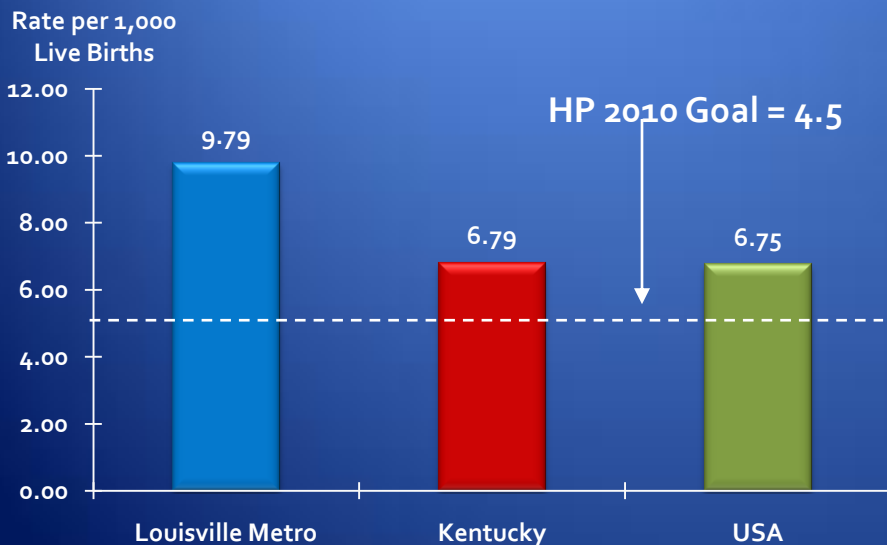


Source: KYDPH BRFSS 2004, 2009, LMPHW BRFSS 2004, 2005, 2008

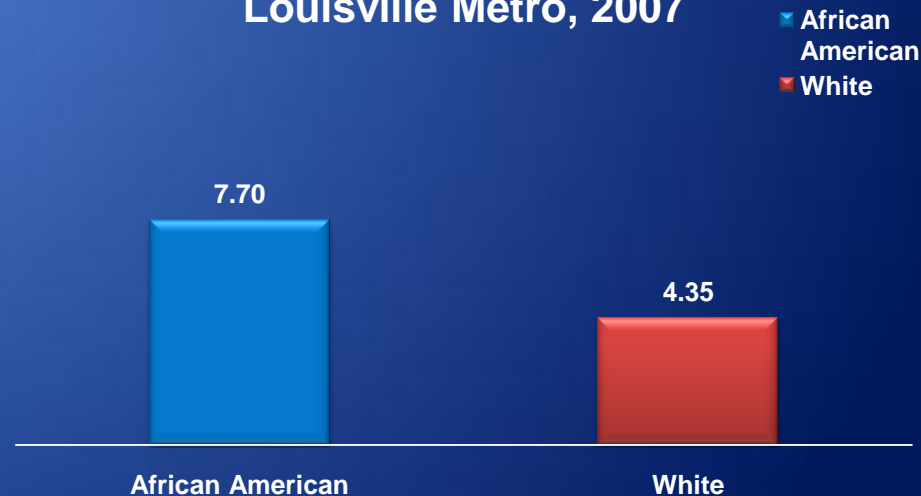
Maternal and Child Health, 2007

- Preliminary data reports that there were 10,628 live births in 2007. This was a slight increase from the previous year.
- Asian and Pacific Islander women (30.3), and African American women (20.9) had the highest birth rate compared to White women (13).
- The infant mortality rate for LM is higher than the state and national rates.

Infant Mortality Rate, 2007



Infant Mortality Rate by Race Louisville Metro, 2007

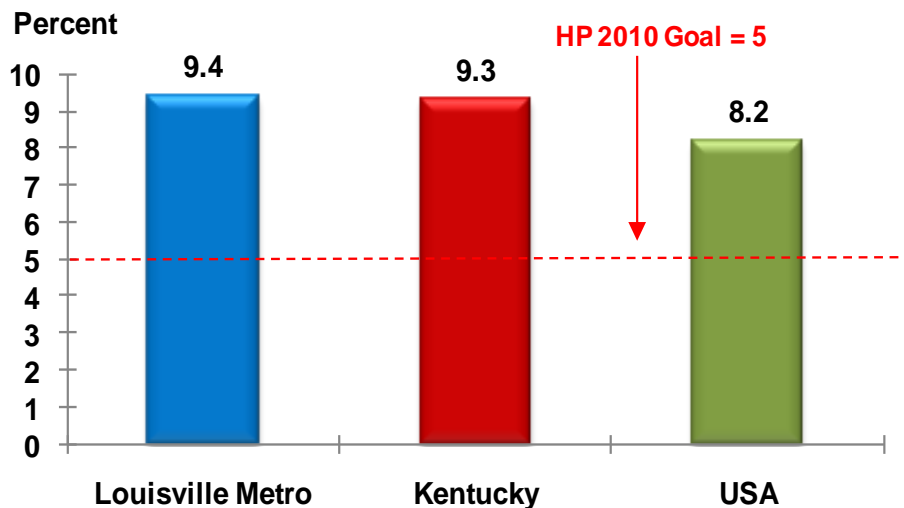


Source: 2007 Louisville Metro Preliminary Birth Records, KY Dept for Public Health

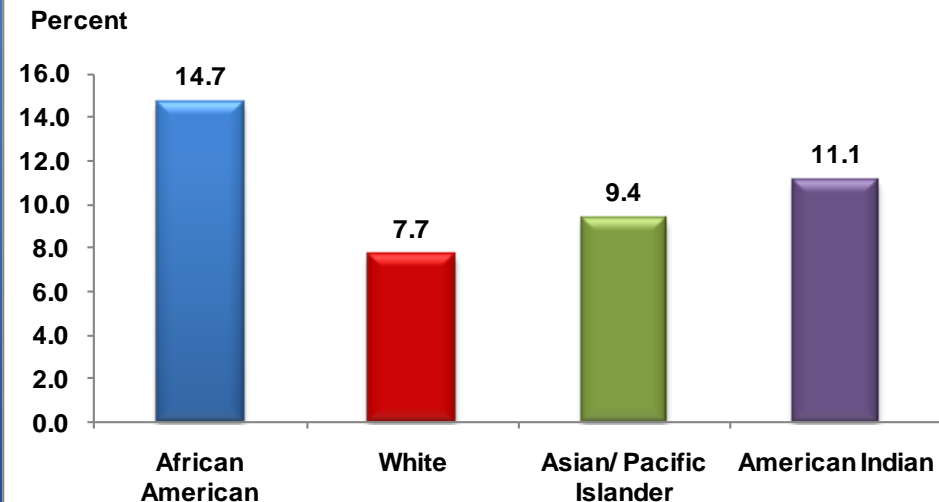
Low Birth Weight (LBW), 2007

- In 2007, 9.4% of the births were classified as LBW. This was higher than the state and national percentage.
- The highest % of LBW babies was among African American mothers. Since 2006, LBW has decreased among African Americans, White and American Indian.

Percent Low Birth Weight, 2007

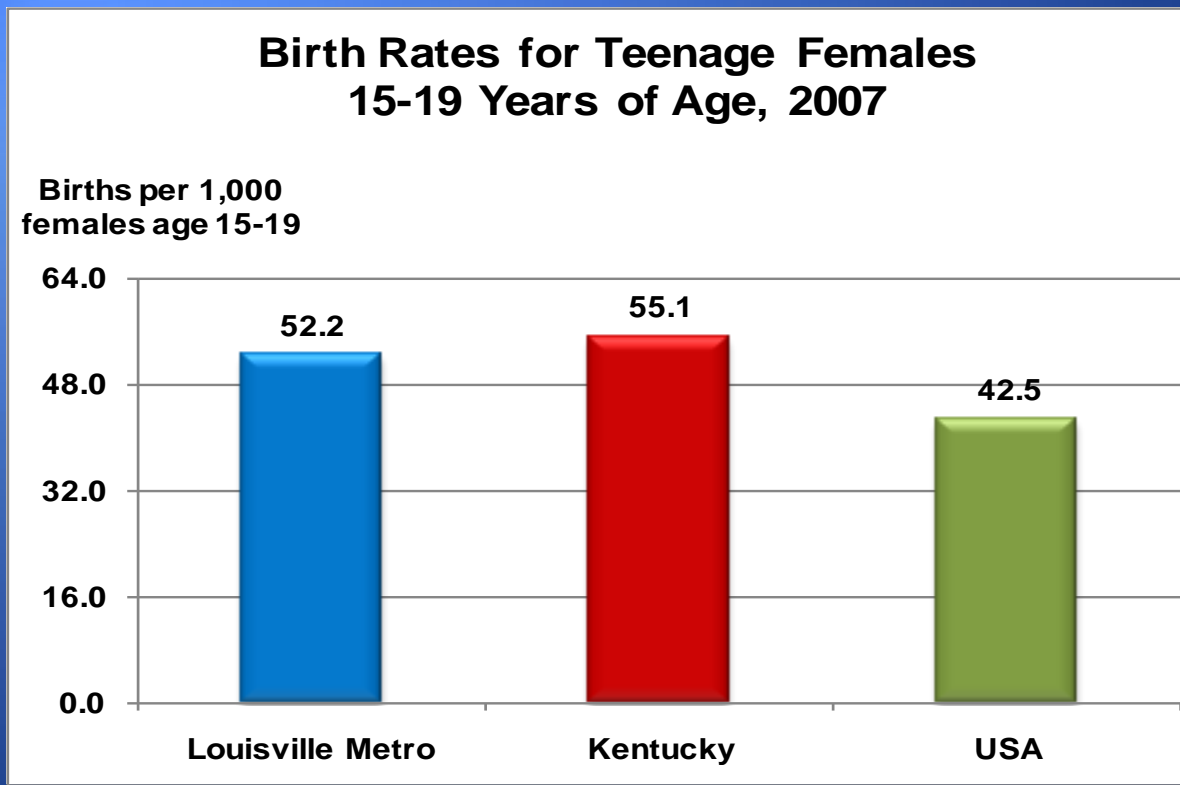


Percent Low Birth Rate by Race
Louisville Metro 2007



Birth to Teens, 2007

- Birth rates for teens did not change from 2006 to 2007 and remained slightly lower than the state birth. However, both state and Louisville Metro birth rates remain higher than the national.

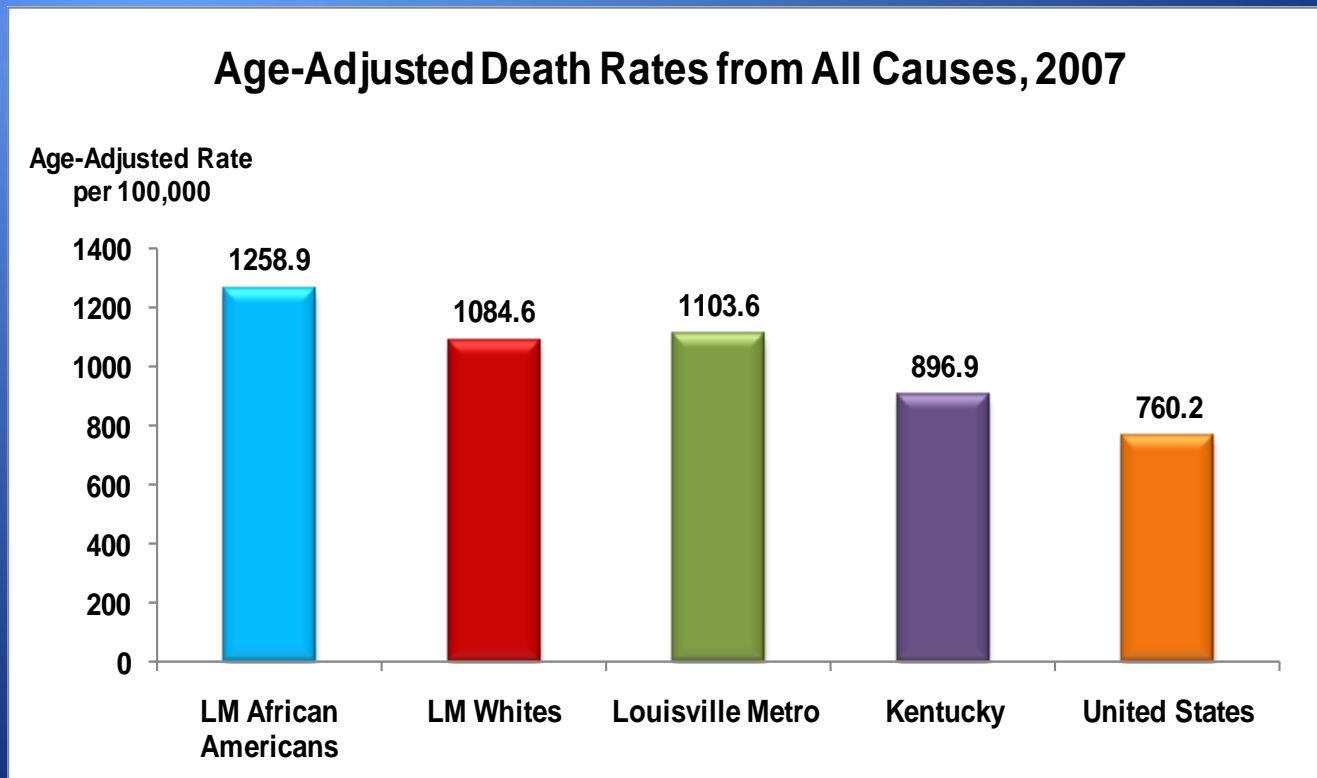


Source: 2007 Louisville Metro Preliminary Birth Records, KY Dept for Public Health

Causes of Death, 2007

➤ As of 2007, the age-adjusted* death rate from all causes (1,103 per 100,000) was higher than state and national rates. Death rates have increased by 16% between 2006 and 2007.

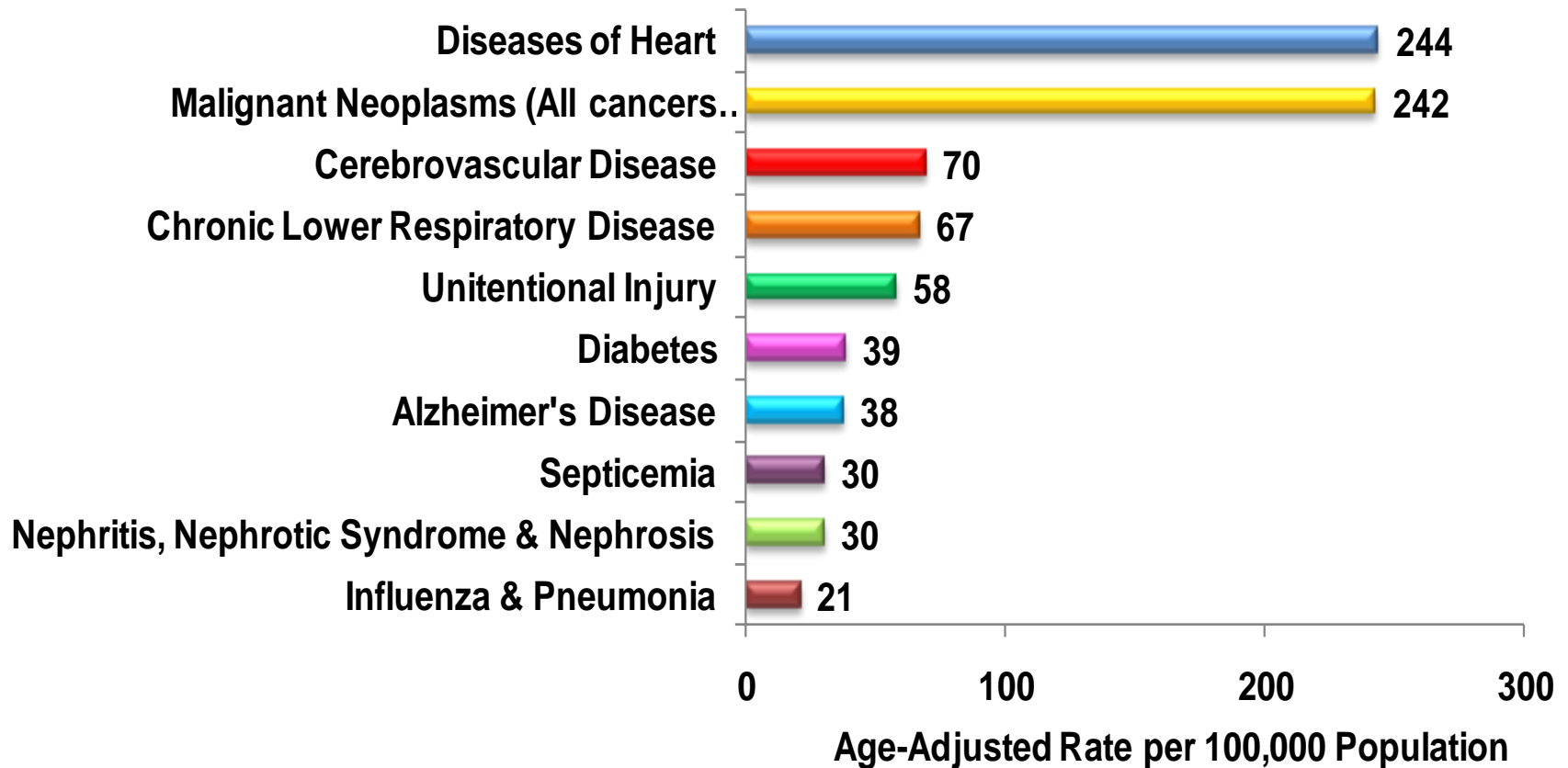
* Age-adjusted rate refers to a statistical process that is used when calculating the rates of disease, death or other health outcomes that allow communities with different age structures to be compared.



Source: 2007 Louisville Metro Preliminary Birth Records, KY Dept for Public Health

Top Ten Causes of Death

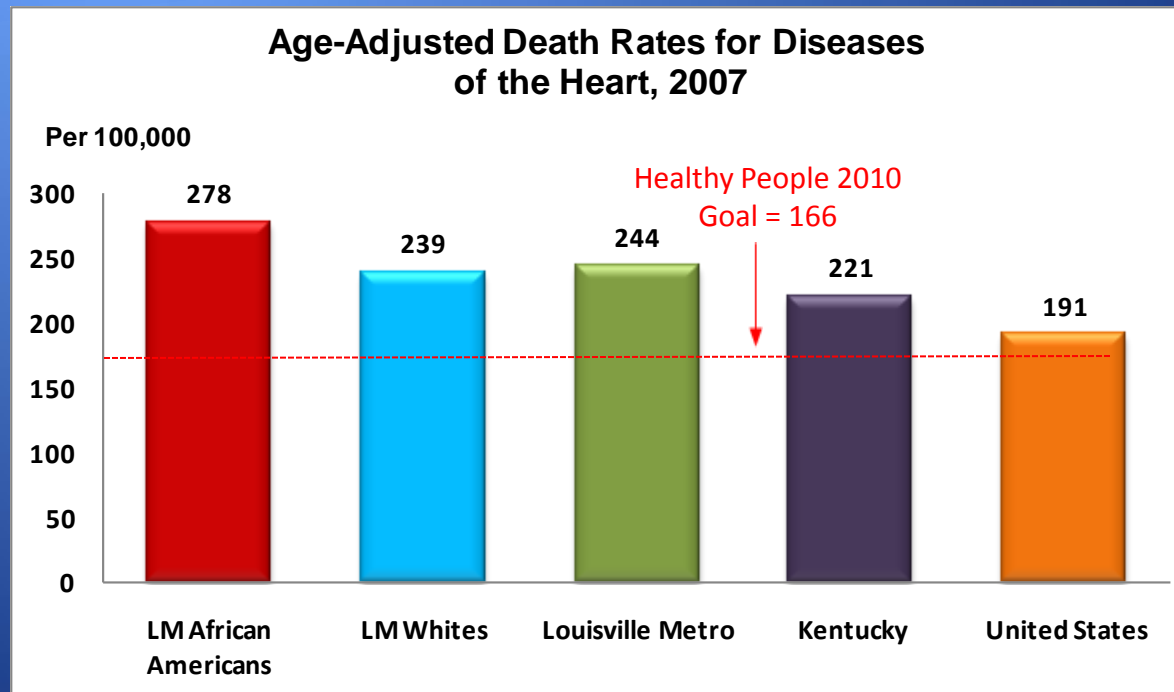
Age-Adjusted Mortality Rates for Leading Causes of Death Louisville Metro, 2007



Source: 2007 Louisville Metro Preliminary Birth Records, KY Dept for Public Health

Chronic Disease, 2007: Disease of the Heart

- Death rate for diseases of the heart was 244 per 100,000 population.
- This rate for Louisville Metro was higher than the state or national rates, with death rates among African-American being the highest.

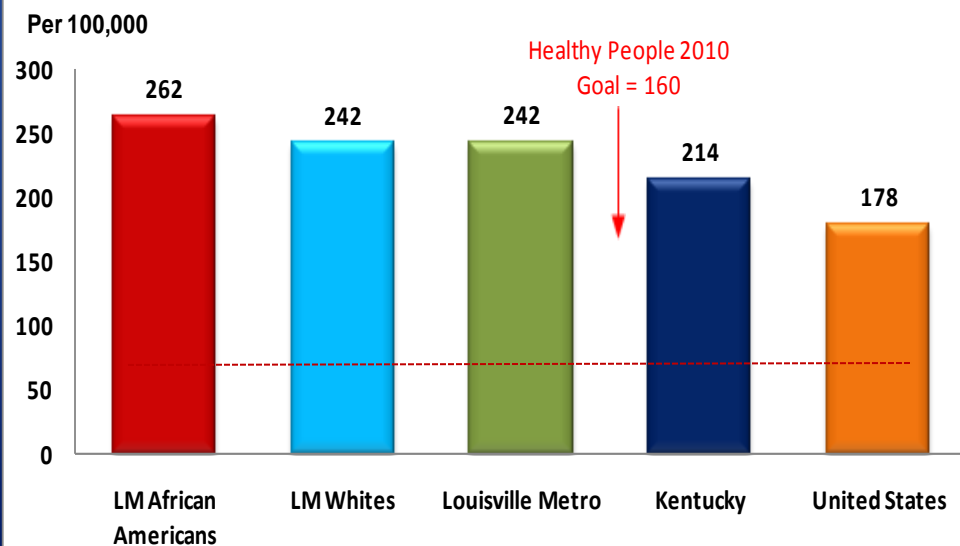


Source: 2007 Louisville Metro Preliminary Birth Records, KY Dept for Public Health

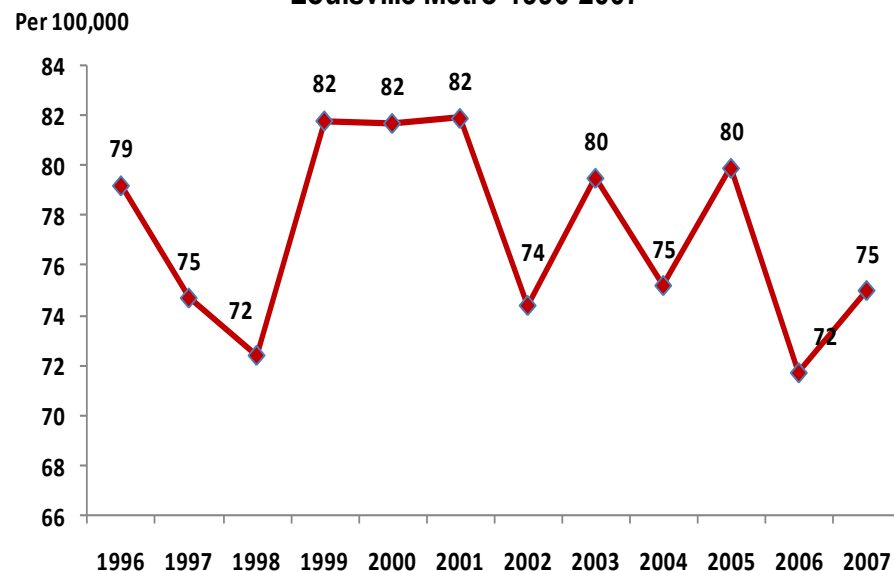
Chronic Disease, 2007: Cancers

- Death rate for all cancers combined (malignant neoplasms) was 242 per 100,000 population.
- Lung cancer death rate was 75 deaths per 100,000.

Age-Adjusted Death Rate for Malignant Neoplasms (All Cancers Combined), 2007



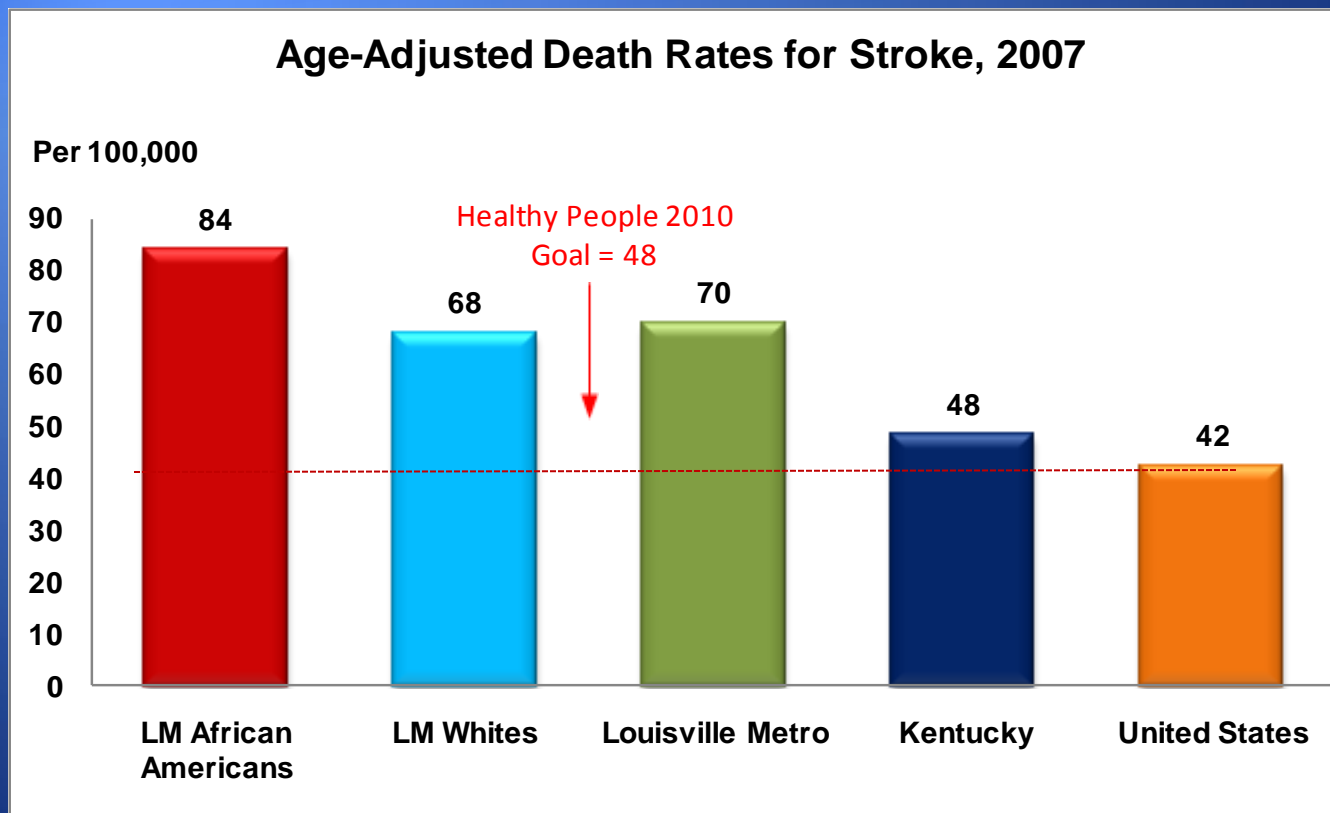
Age-Adjusted Death Rates from Lung Cancer, Louisville Metro 1996-2007



Source: 2007 Louisville Metro Preliminary Birth Records, KY Dept for Public Health

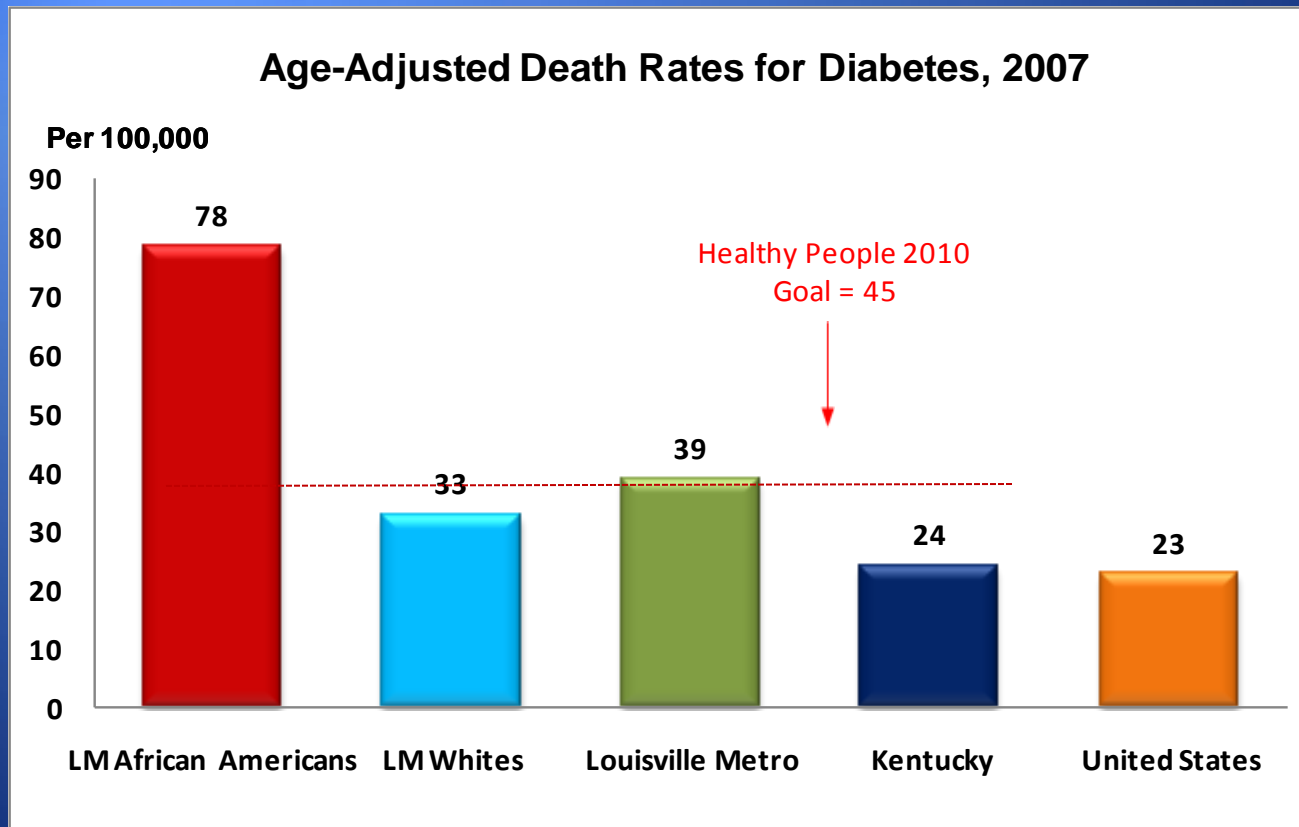
Chronic Disease, 2007: Stroke

- Death rate for strokes was 70 per 100,000 population.
- Death rate for African Americans was higher than the death rate for Whites (84 compared to 68 per 100,000).



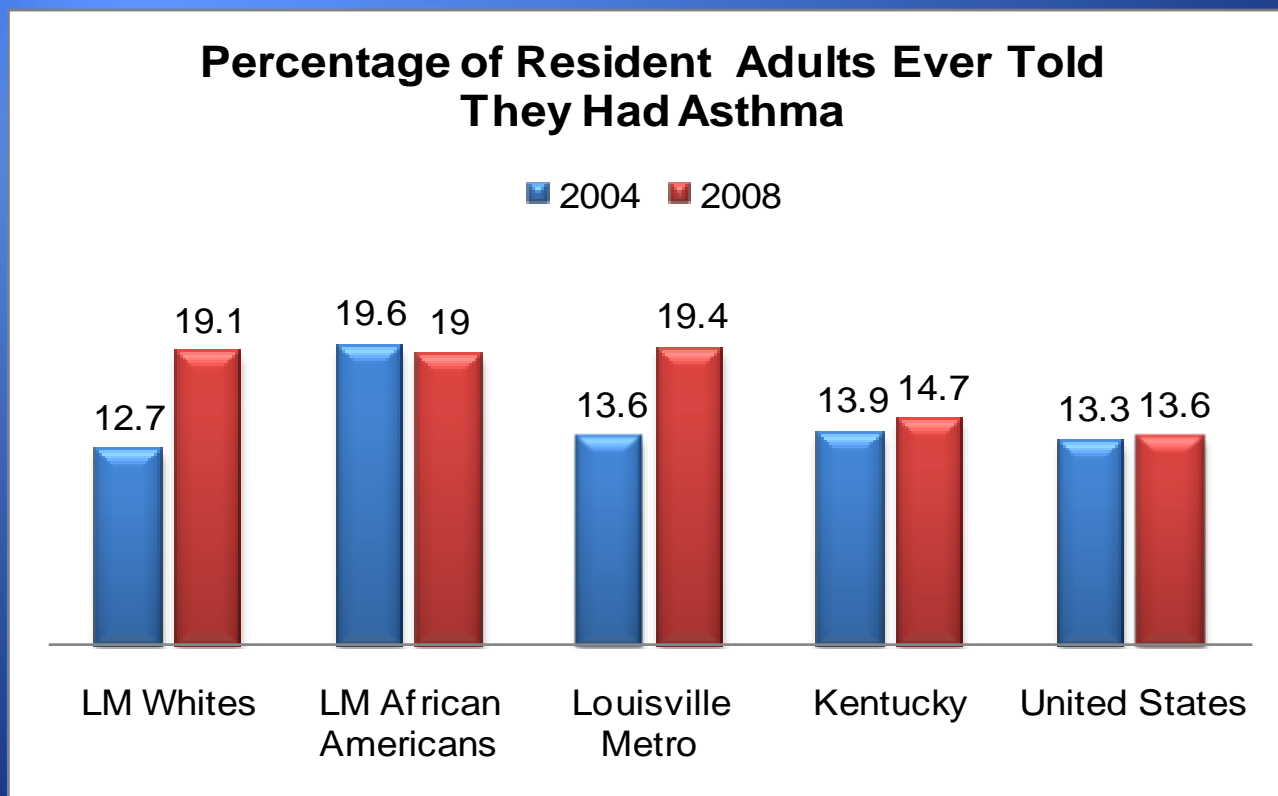
Chronic Disease, 2007: Diabetes

- Diabetes death rate was 39 deaths per 100,000.
- For African Americans, death rate from diabetes was more than twice the rate for Whites (78 compared to 33 per 100,000).



Chronic Disease, 2007: Asthma

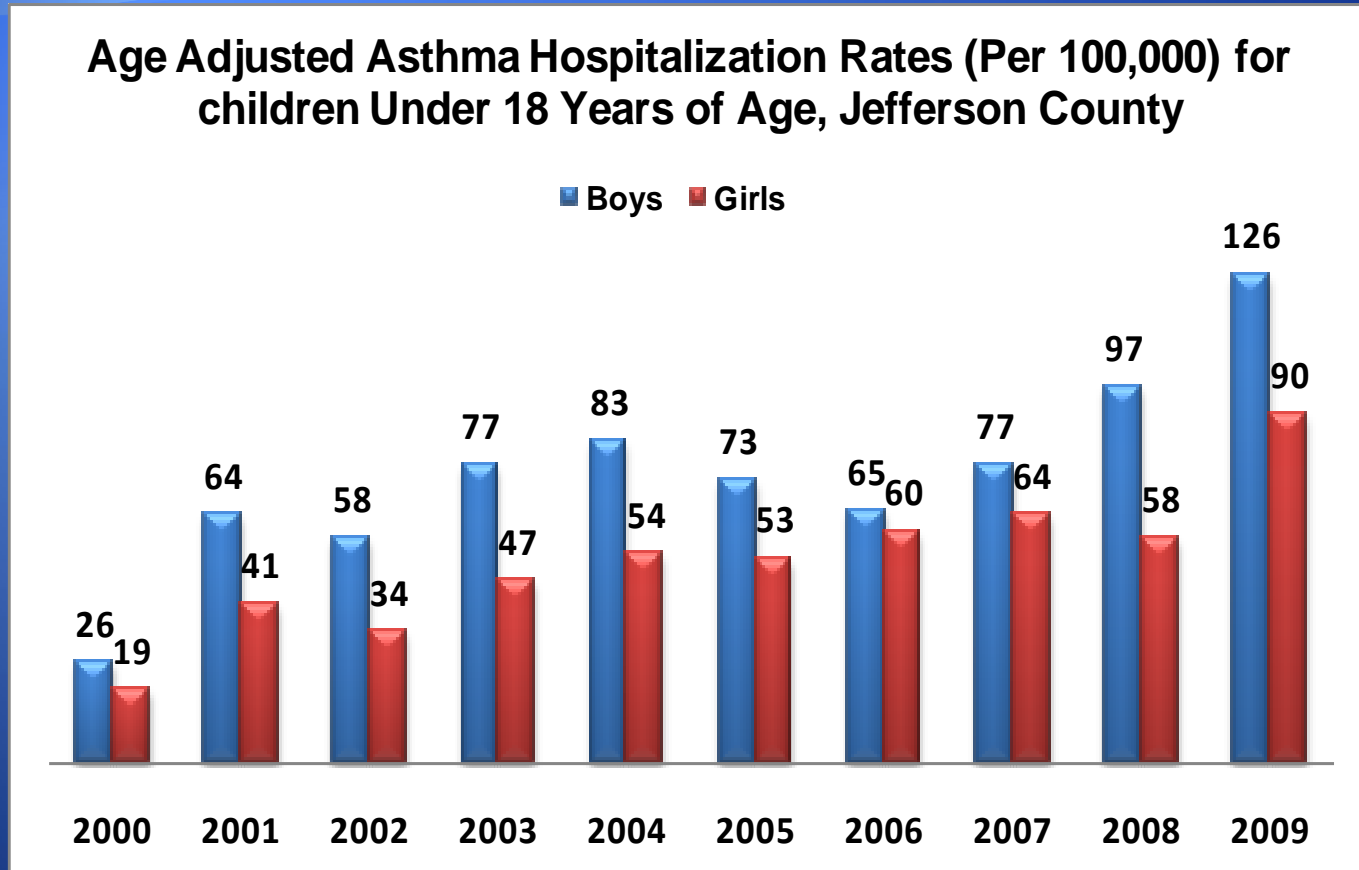
- The percentage of respondents to the Behavioral Risk Factor Surveillance Survey (BRFSS) that reported having asthma increased from 13.6% to 19.1% between 2004-2008 for LM but remained the same with the Kentucky CHFS sample over time.



Source: LMPHW BRFSS 2004, 2008, Kentucky CHFS BRFSS 2004, 2009

Asthma Prevalence - Youth

- Hospitalization rates in Jefferson County for children under 18 years of age have significantly increased since 2000, particularly for boys.

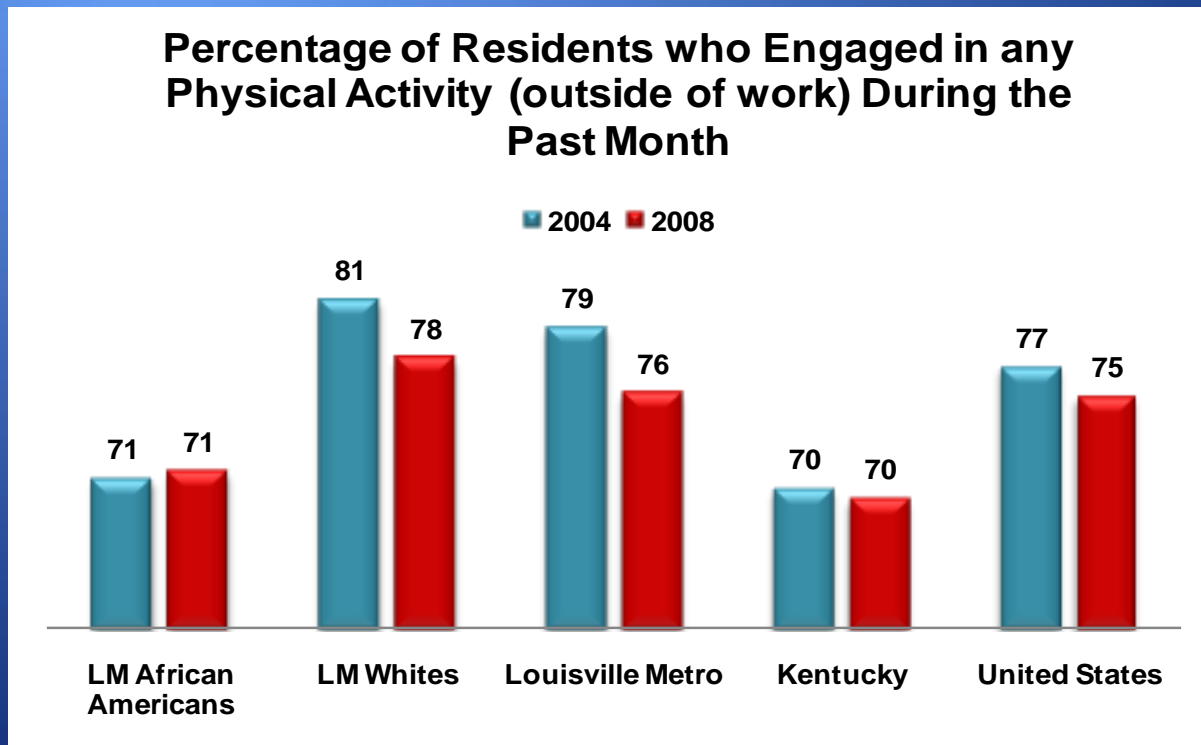


Source: Kentucky Cabinet for Health and Family Services, Office of Health Policy

Behavioral Risk Factors:

Physical Activity

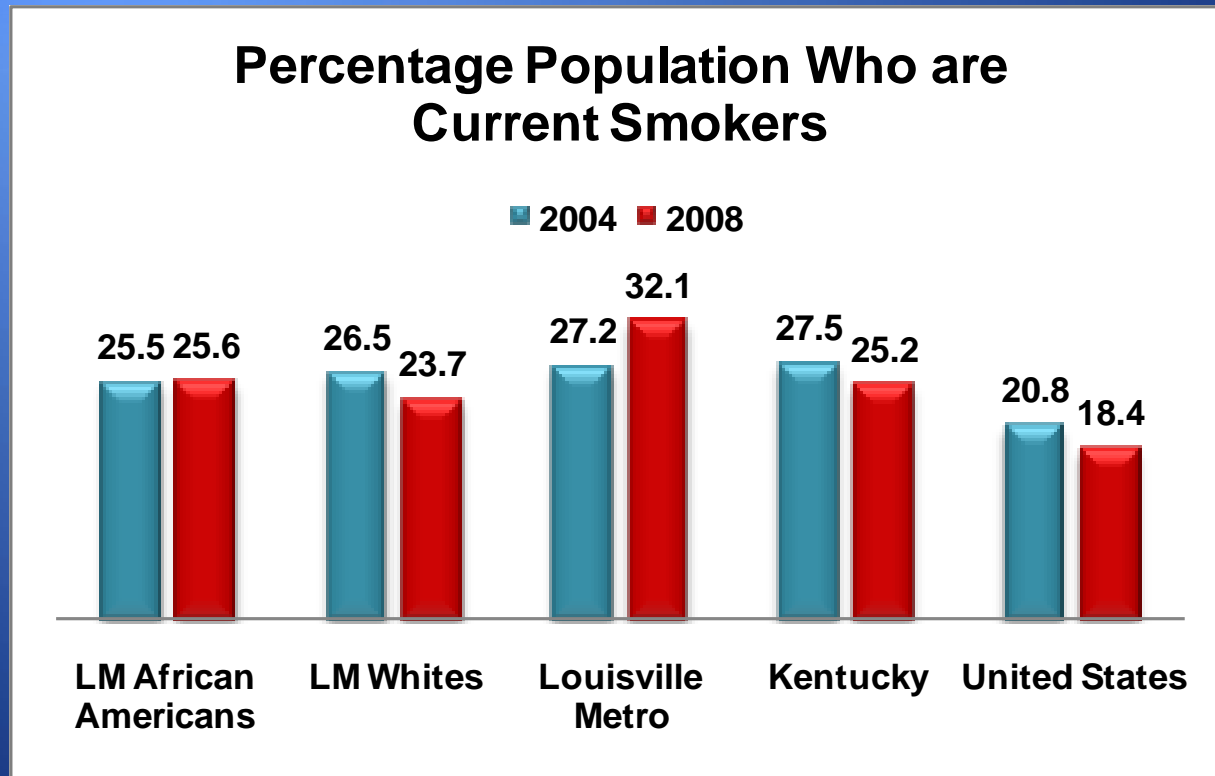
- 76% of respondents to the Behavioral Risk Factor Surveillance Survey (BRFSS) reported participating in some physical activity outside of work in Louisville Metro as of 2008.
- BRFSS data show percentage of physical activity among respondents decreased between 2004 and 2008.



Source: LMPHW BRFSS 2004, 2008, Kentucky CHFS BRFSS 2004, 2009

Behavioral Risk Factors: Smoking

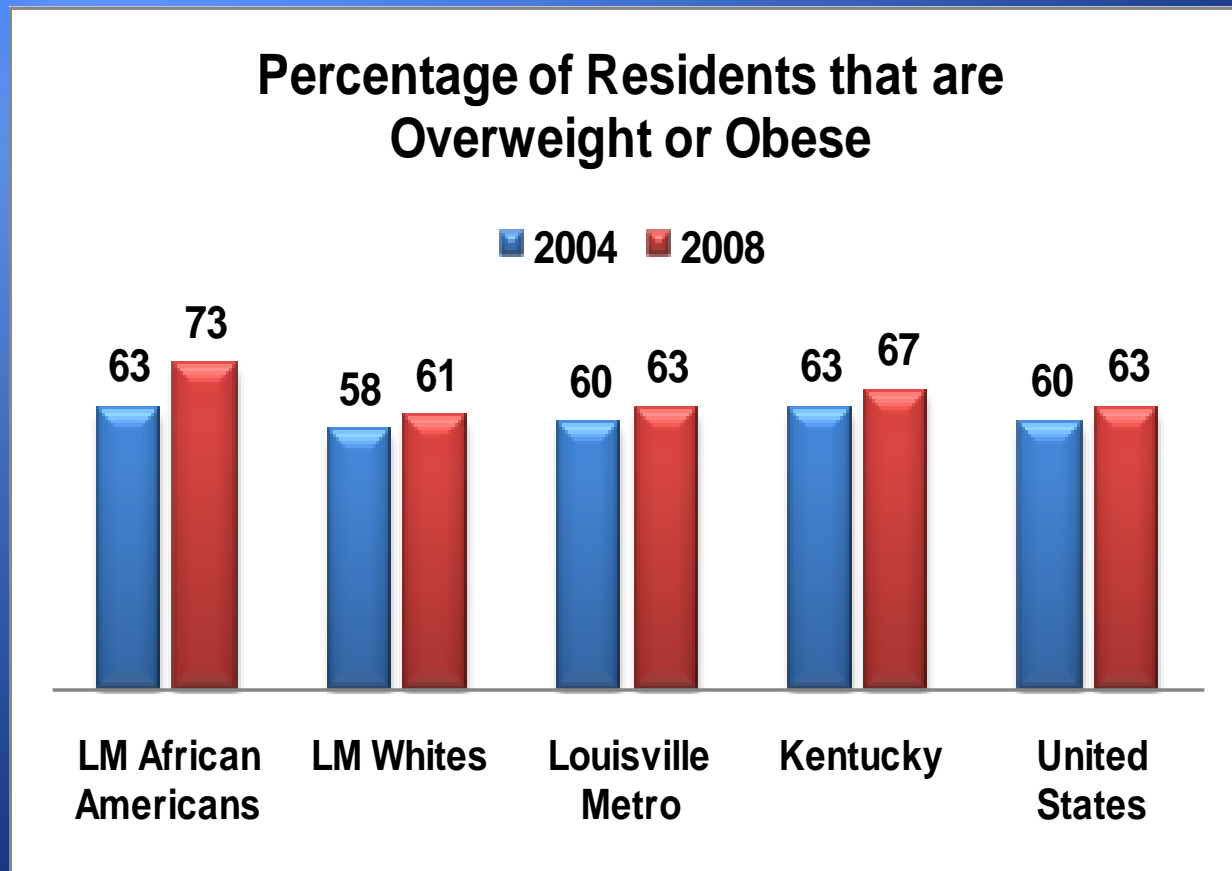
- The number of BRFSS respondents living in Louisville Metro that reported they smoked tobacco increased from 27.21% to 32.1% between 2004 to 2008.
- The percentage of LM Whites slightly decreased from 2004 (26.5) to 2008 (23.7) and African American percentages remained the same (25.6).



Source: : LMPHW BRFSS 2004, 2008, Kentucky CHFS 2004, 2009

Behavioral Risk Factors: Obesity

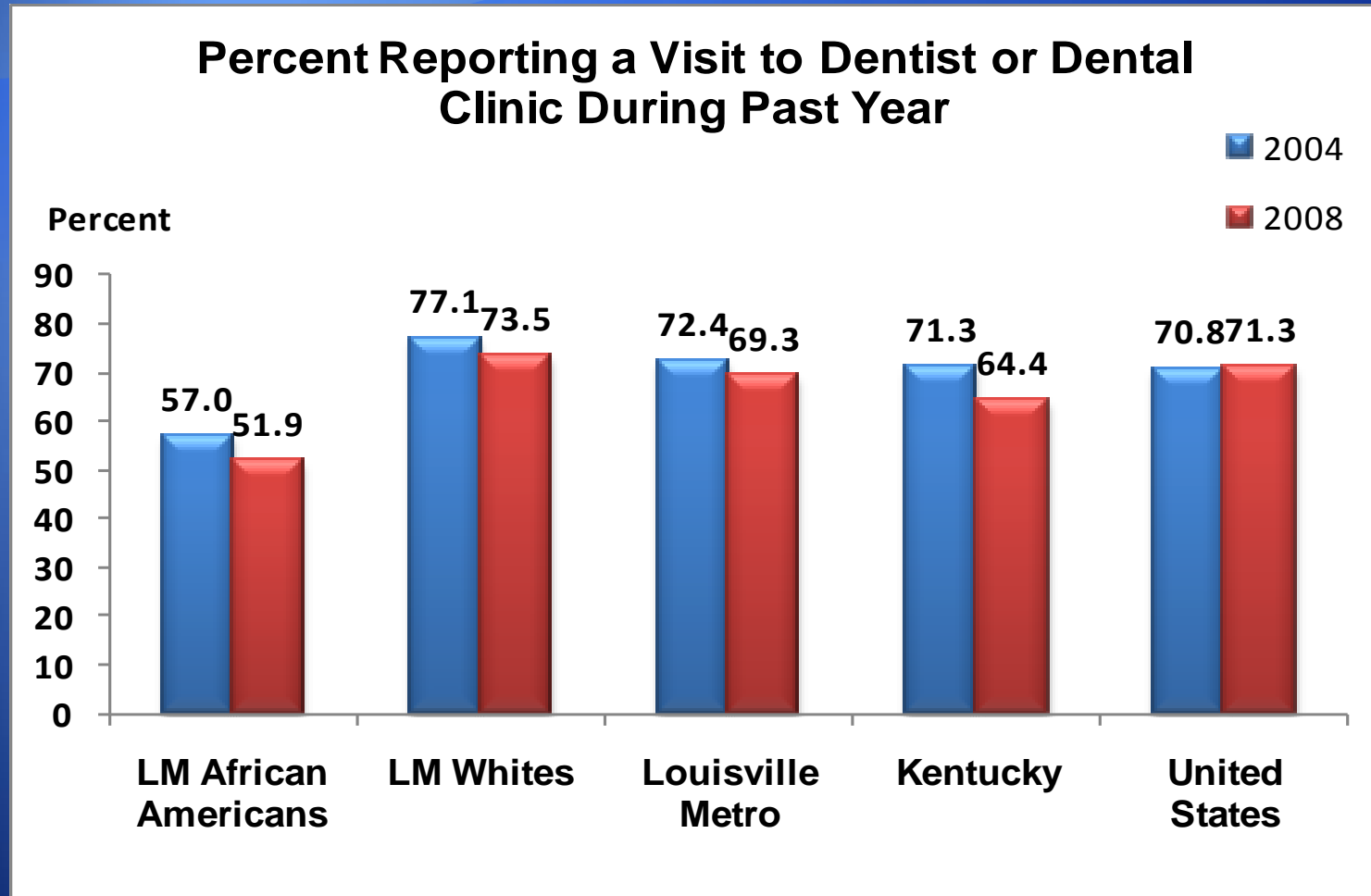
- The percentage of respondents either obese or overweight based on reported height and weight continues to increase.
- African Americans respondents were reported to be more likely overweight or obese when compared to LM Whites.



Source: LMPHW BRFSS 2004, 2008, Kentucky CHFS 2004, 2009

Behavioral Risk Factors: Oral Health

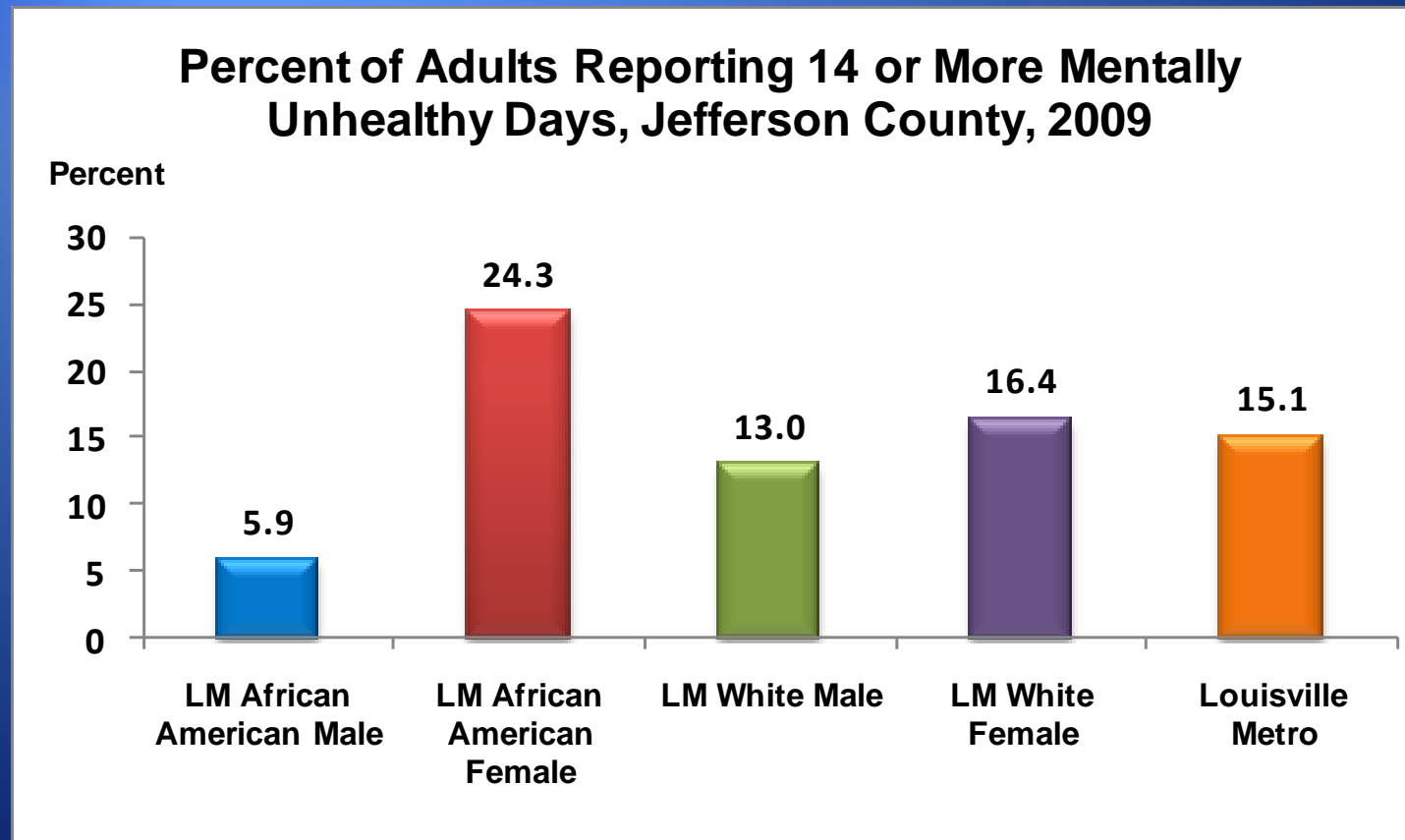
- BRFSS respondents showed an overall decrease in number of residents visiting a dentist during the past year between 2004 and 2008.



Source: LMPHW BRFSS 2004, 2008, Kentucky CHFS 2004, 2009

Behavioral Risk Factors, 2009: Mental Health

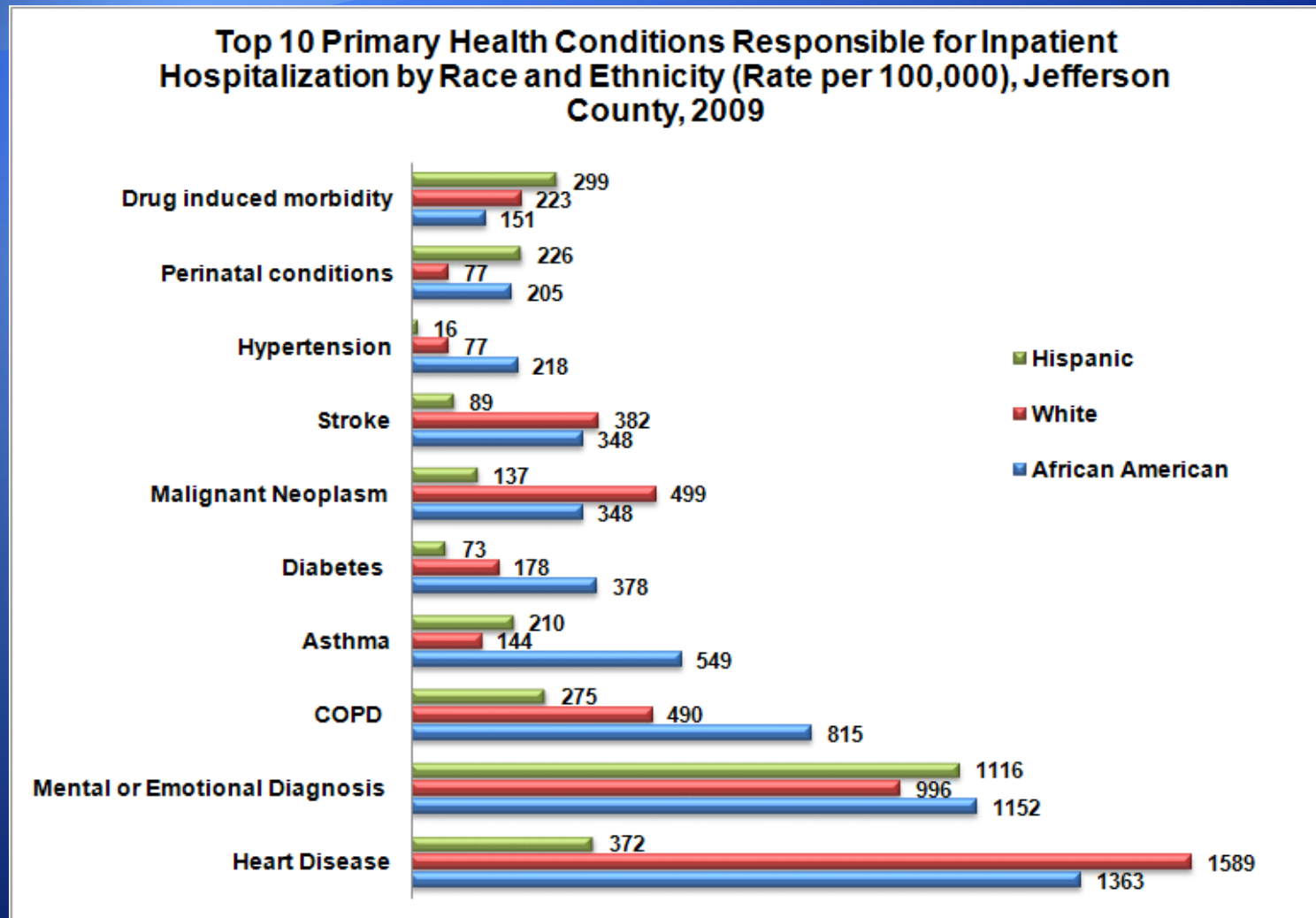
- Over 13% of Louisville Metro respondents reported having 14 or more “mentally unhealthy” days with African American female respondents having the highest percentage (24.3%).



Source: Kentucky CHFS BRFSS 2009

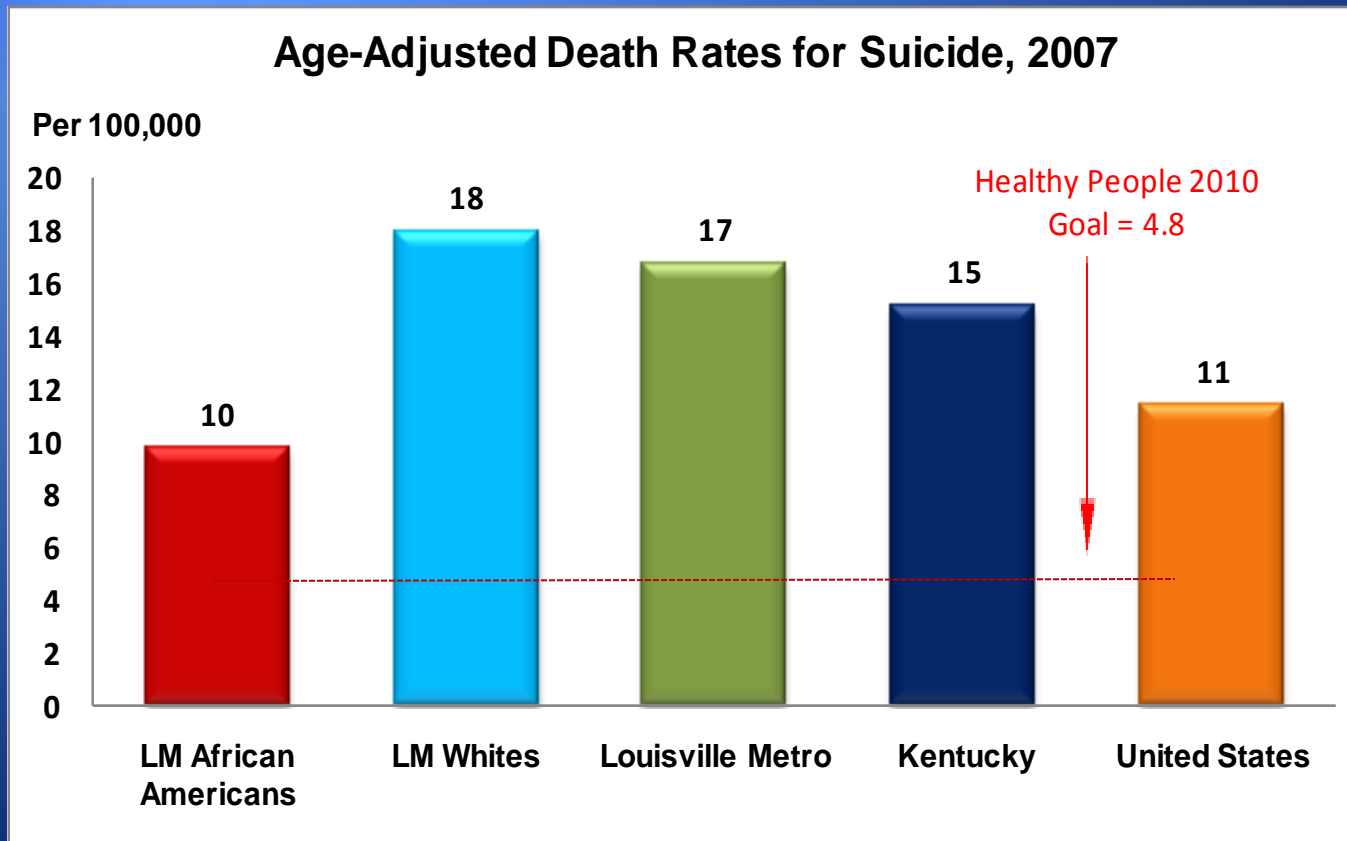
Mental Health Cont..

- As of 2009, mental or emotional diagnosis was the top primary health condition for inpatient hospitalization for Hispanics and the second top primary health condition for Whites and African Americans behind heart disease.



Cause of Death, 2007: Suicide

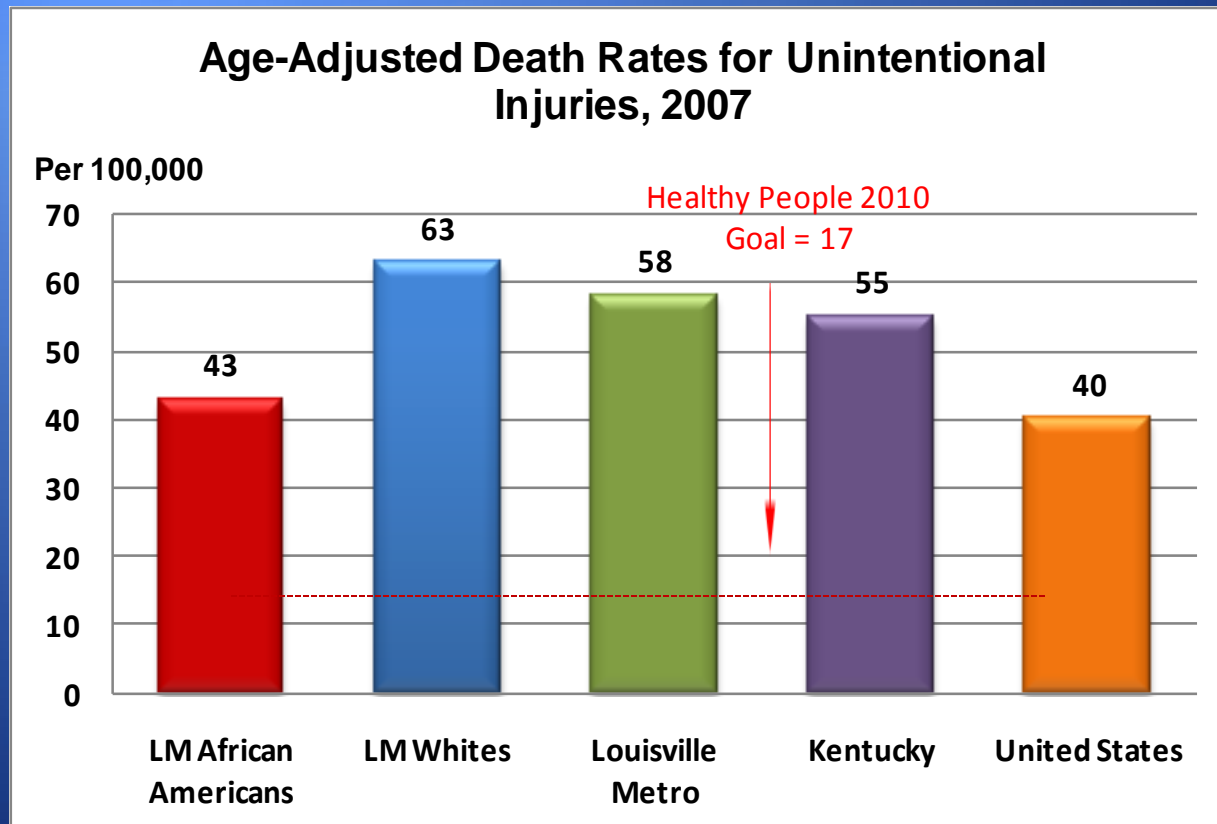
- The suicide rate among Whites was almost twice the rate of African Americans and higher than the state and national rates.
- Native American/Alaskan Native and Hispanic youth have the highest rates of suicide-related fatalities.



Source: 2007 Louisville Metro Death Records

Injuries, 2007: Unintentional

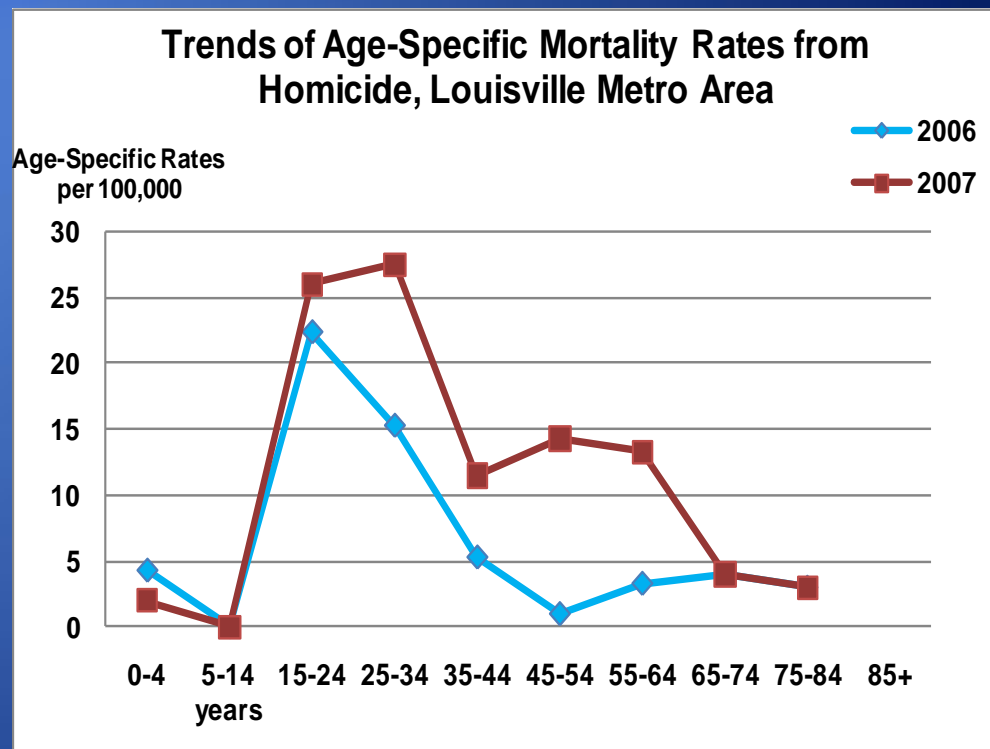
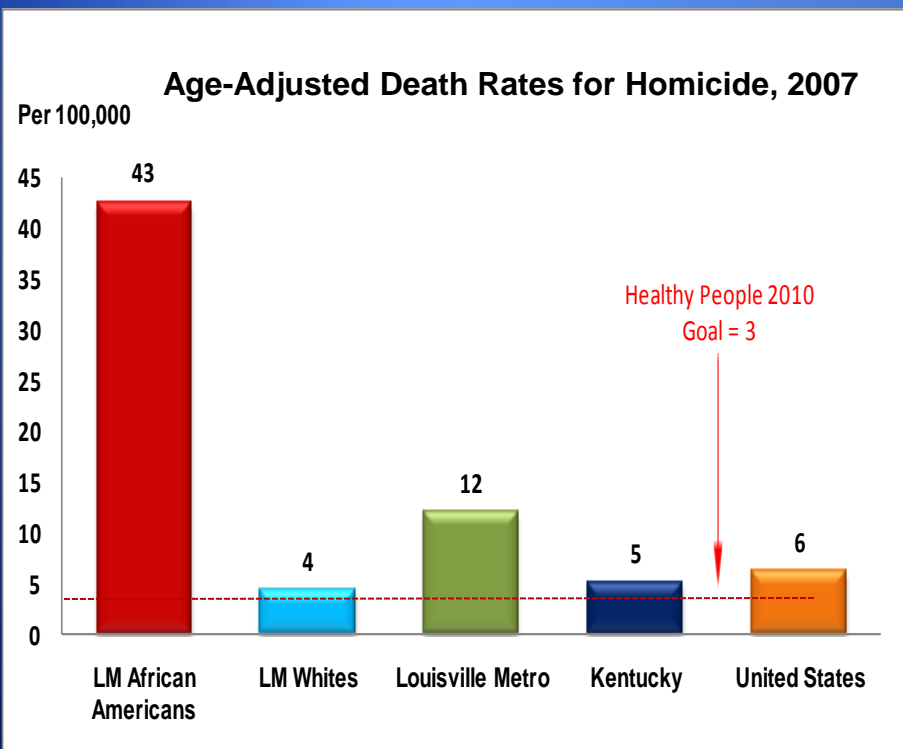
- The death rate from unintentional injury was 58 per 100,000 population, most of which resulted from motor vehicle crashes.
- Whites had approximately 40% higher death rates when compared to African American population and national rates. In 2006, African Americans were twice as likely to experience unintentional injuries compared to Whites.



Source: 2007 Louisville Metro Death Records

Injuries, 2007 Intentional-Homicide

- The homicide death rate was 12 deaths per 100,000. This was double when compared to the state and national rates.
- The homicide death rate for African Americans was more than 10 times that of Whites.

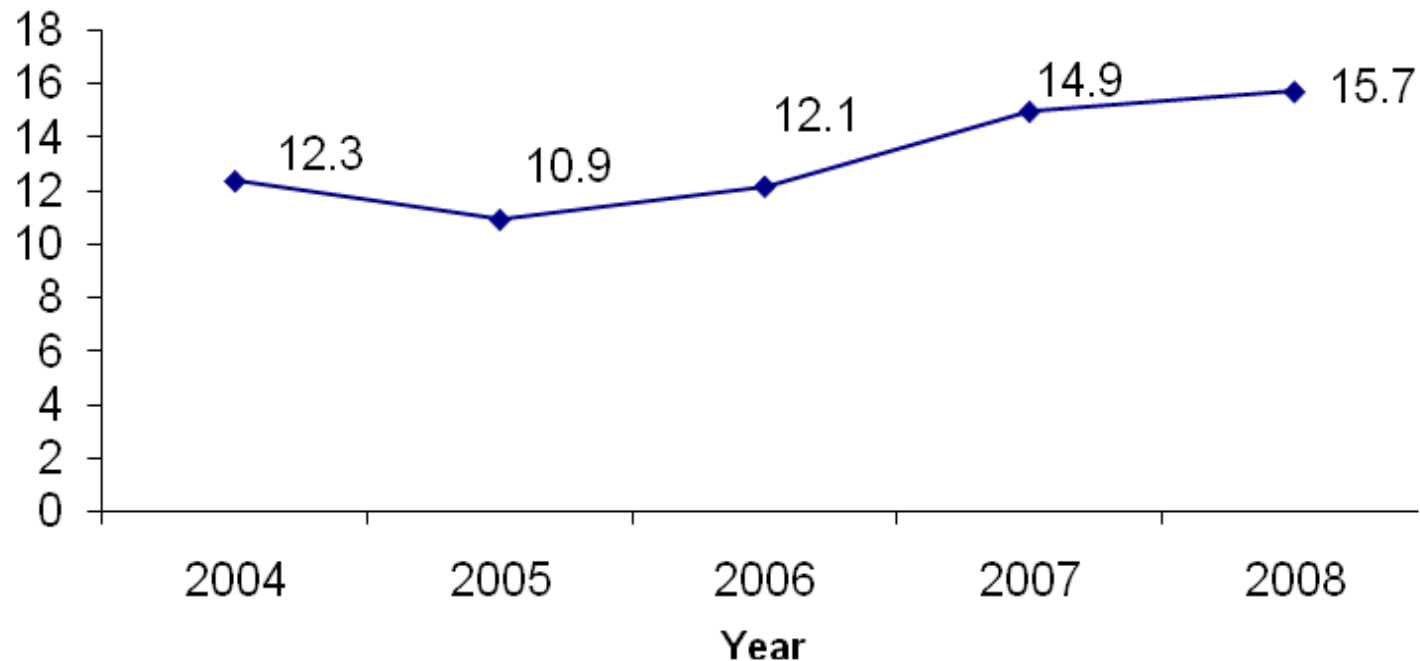


Source: 2007 Louisville Metro Death Records

Communicable Disease, 2009: AIDS

- Newly diagnosed AIDS cases had a rate of 16 per 100,000 population in 2008, with the highest rate for African Americans males.

**AIDS Case Rates by Year of Diagnosis
Louisville Metro**



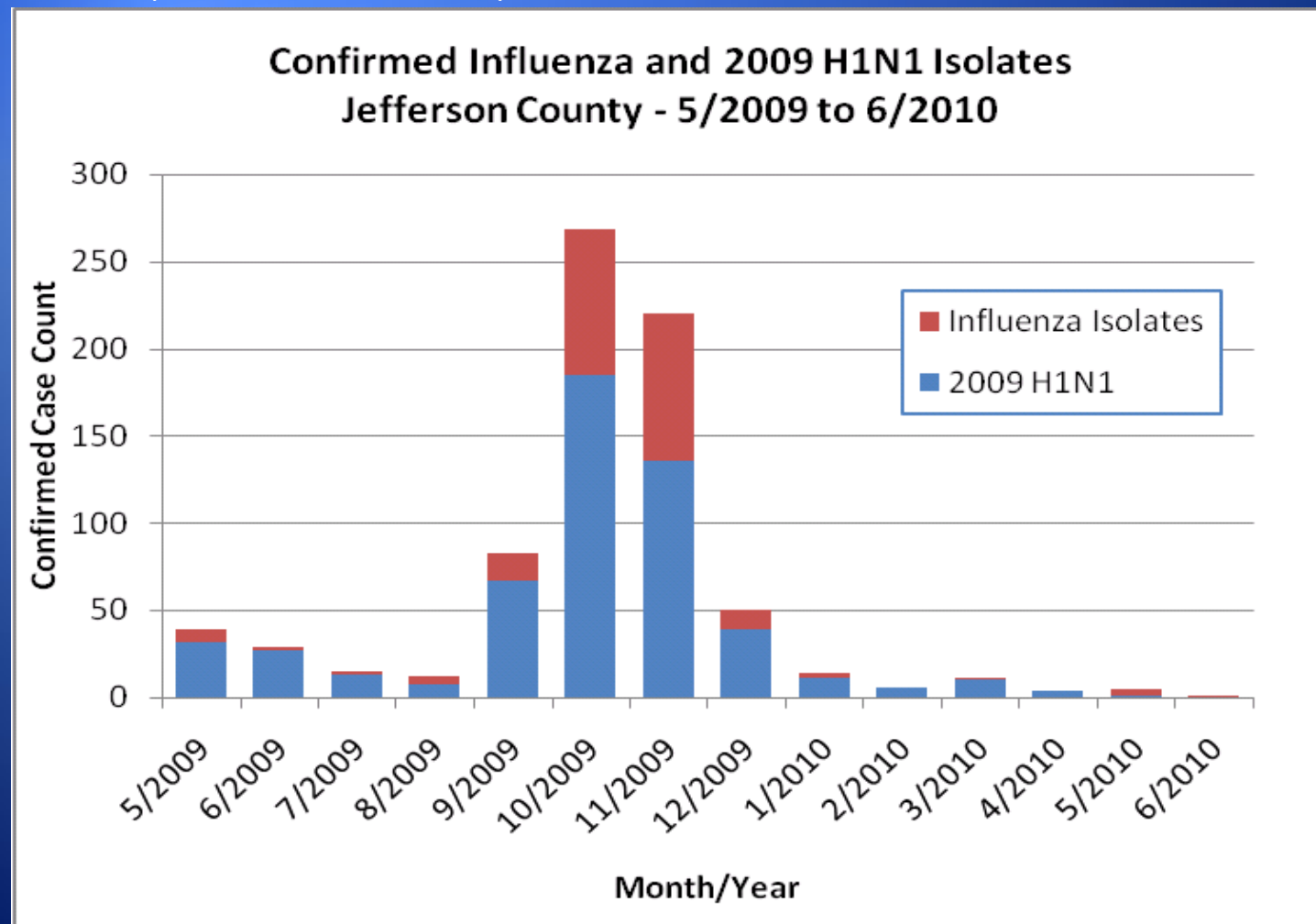
Communicable Disease, 2009: H1N1

➤ Culture confirmed reports received for 13 consecutive months (May 2009-June 2010).

➤ Culture confirmed cases:

2009: H1N1 (Novel A Influenza) – 506, Influenza: 332

2010: H1N1 (Novel A Influenza) – 34, Influenza: 22



H1N1 Vaccination Campaign, 2009

Total population receiving vaccination: 79,748 (Louisville metro: 75,199 (94.3%))

Administration Sites : Community clinic- 19,396 School- 49,216
Open clinic- 5,728 Miscellaneous- 859

Race/Ethnicity: White: 71.2% African America/Black: 17.1%
Asian: 3.2% Native American: 0.2%
Pacific islanders: 0.1% Hispanic 3,339 (4.2%)

Gender: Female: 42, 830 (53.7%)
Male: 35,393 (44.4%) Male

High risk categories:
Pregnant: 705
Immune compromised: 1,746
Other health conditions: 13,681

H1N1 Vaccination Campaign, 2009

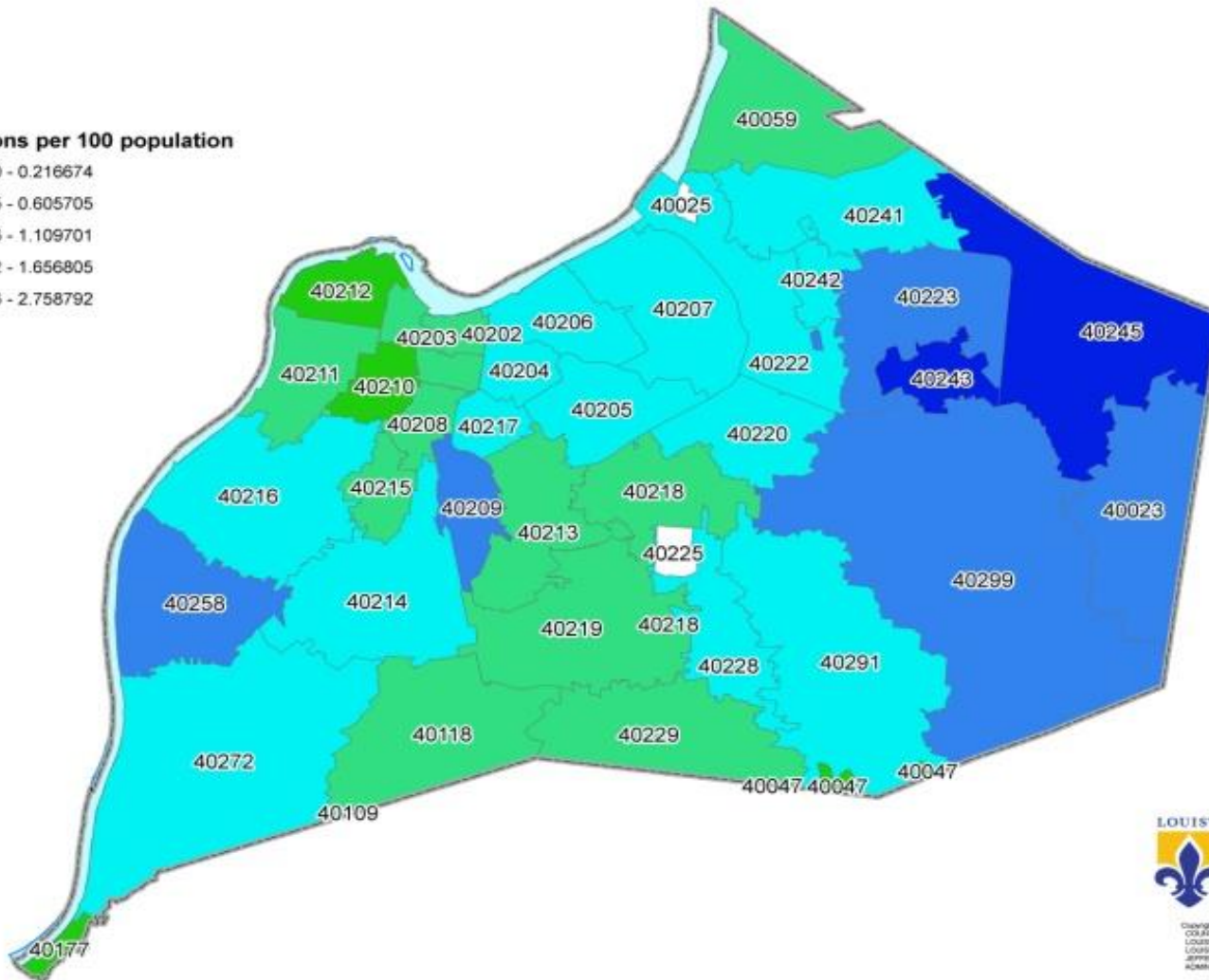
H1N1 Vaccinations in 2009 Open Clinics Vaccinations per 100 Residents in Zip Code



Legend

ZIP Codes

Vaccinations per 100 population

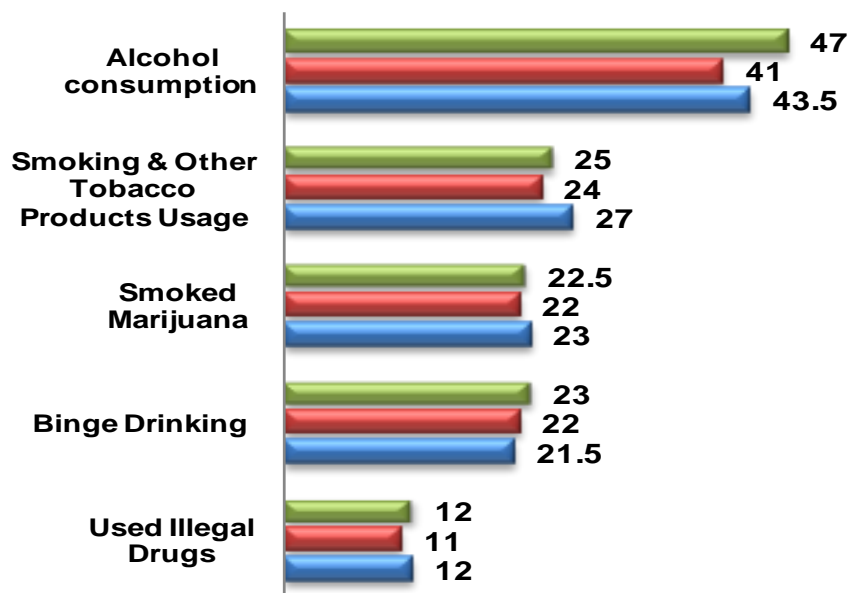


Youth Risk Behaviors, 2010

- Over 100,000 respondents for the 2007, 2008 and 2009 Safe and Drug Free School Survey, Jefferson County Public Schools.
- 4 in every 10 respondents reported consuming alcohol in their life time and 2 out of 10 reported consumption of alcohol in past 30 days

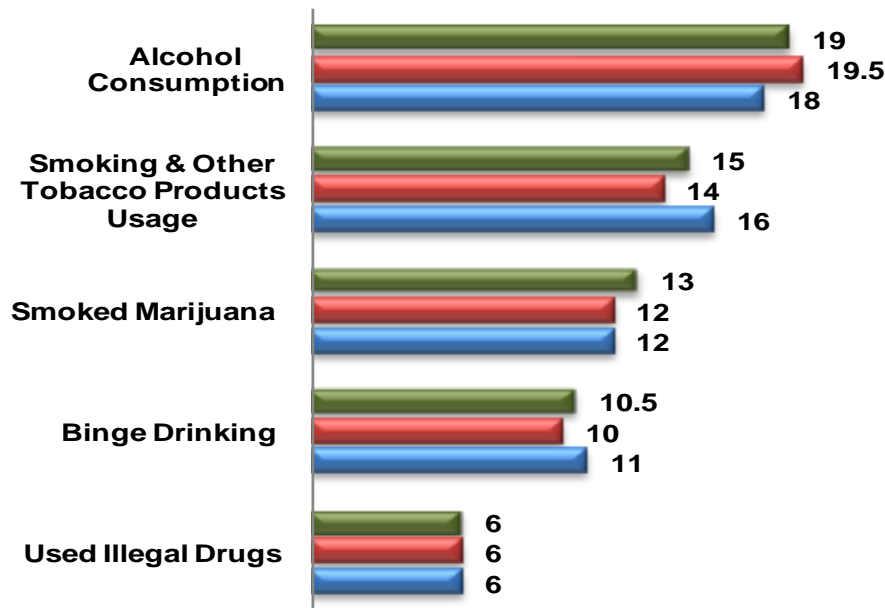
Percentage Students Engaging in Risk Behaviors in Their Life Time

■ 2007-08 ■ 2008-09 ■ 2009-10



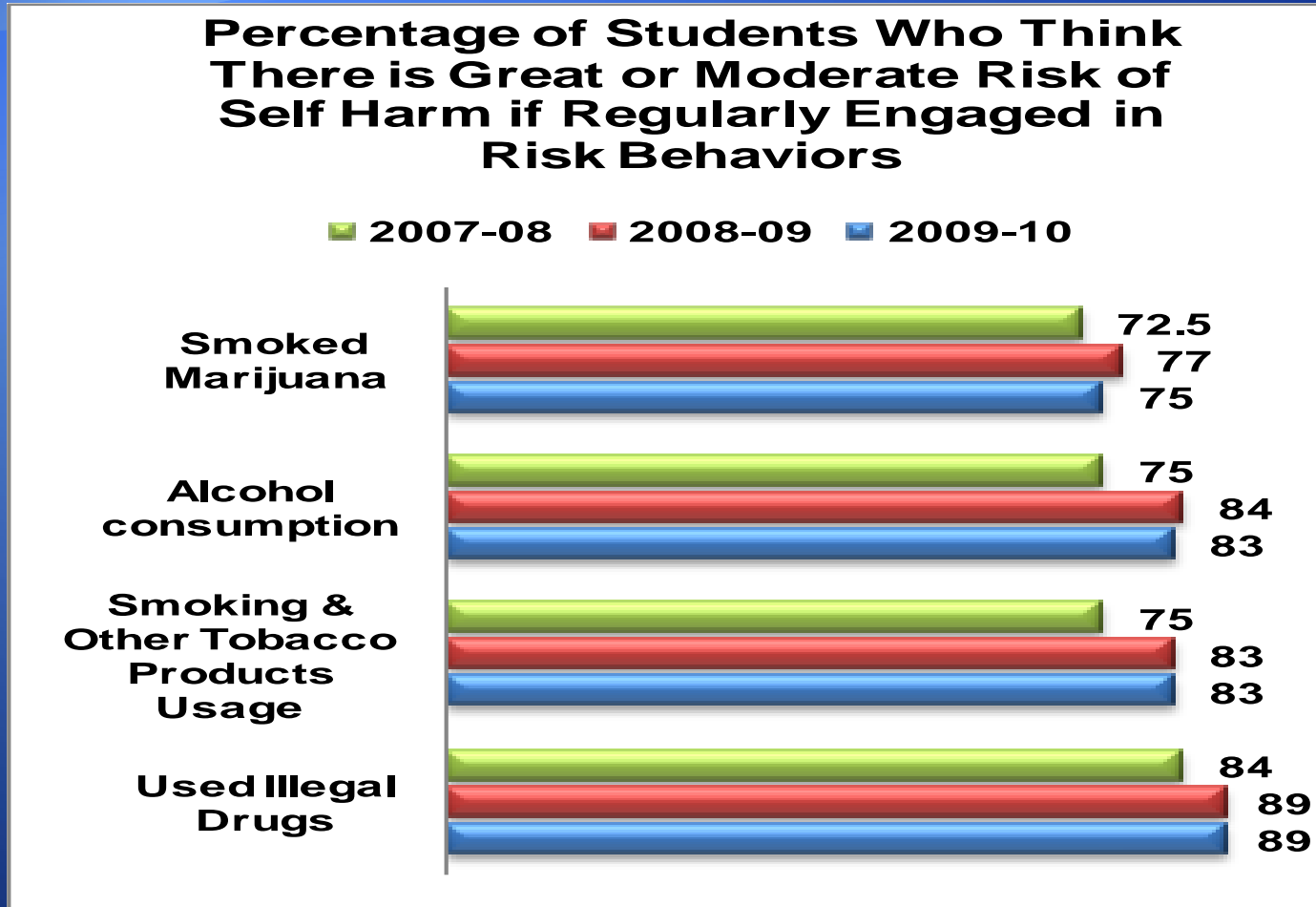
Percentage Students Engaging in Risk Behaviors for More than 1 Time in Past 30 Days

■ 2007-08 ■ 2008-09 ■ 2009-10



Youth Risk Behaviors, 2010

➤ Survey shows an increase in awareness over time, however the percentage of respondents who think there is slight or no risk in engaging in high risk behaviors remains high.

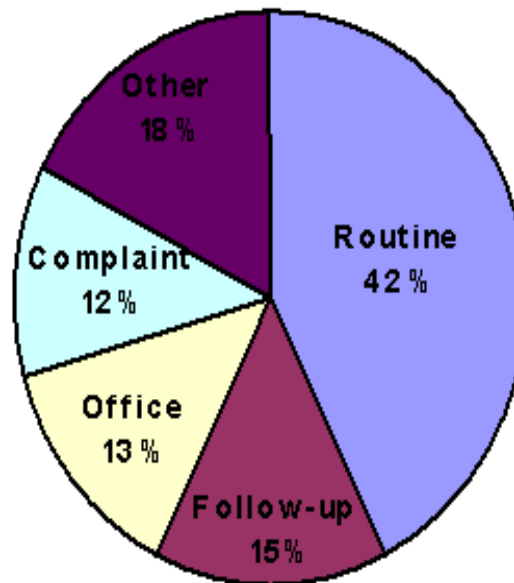


Source: Safe and Drug Free school survey, Jefferson County Public School District

Environmental Health, 2009

- Louisville Metro Dept of Public Health and Wellness Environmental Division includes: Food Hygiene, Public Facilities, Hazardous Materials, Childhood Lead Poison and Prevention, Mosquito Control.
- Environmental Division provided approximately 24,000 services to Louisville Metro population in 2009.

**Percent of Environmental Inspections
by Inspection Type, 2009**



Source: 2009 LMPHW Division of Environmental Health and Protection

Environmental Health, 2009

Food Hygiene:

- 7,012 routine inspections, 1,407 complaint investigations and 190 food borne illness investigations conducted during year 2009
- Over all the number of critical violations decreased over time.

Public facilities:

- (1) Recreational Water Illnesses (RWI's): Cryptosporidium, Giardia, Escherichia. coli, Norovirus, Adenovirus and Hepatitis A.

1,228 routine inspections, responded to 158 citizen complaints, collected and analyzed 7,085 water samples in 2009.

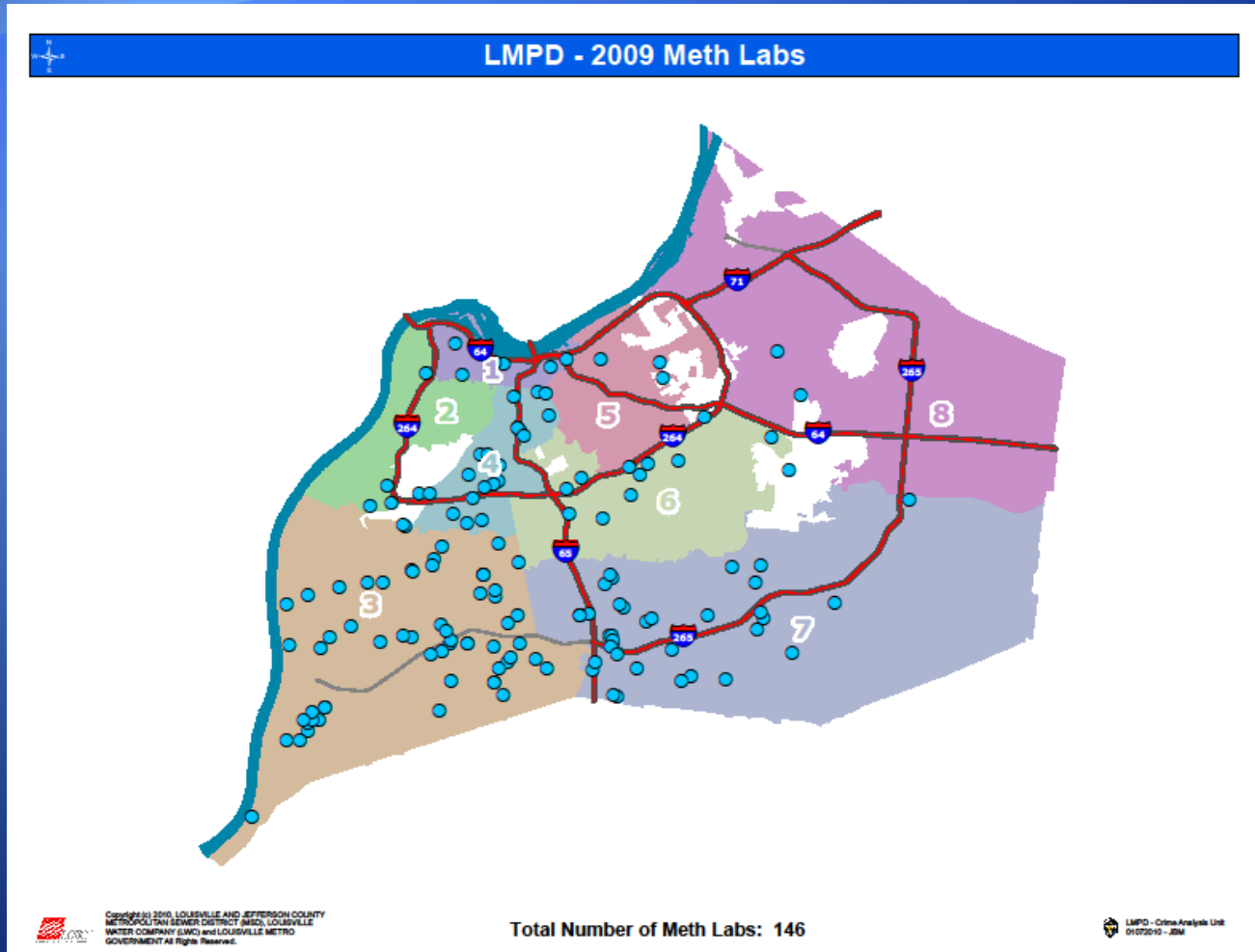
Total of top 5 aquatic facility critical violations: 1659

- (2) Rabies: Over 1000 animal bites each year and total # of animal bites remained almost same as of 2008

Environmental Health, 2009

Meth labs:

➤ 146 properties where evidence of Methamphetamine production was discovered in 2009. This is 50% increase when compared to 2008.



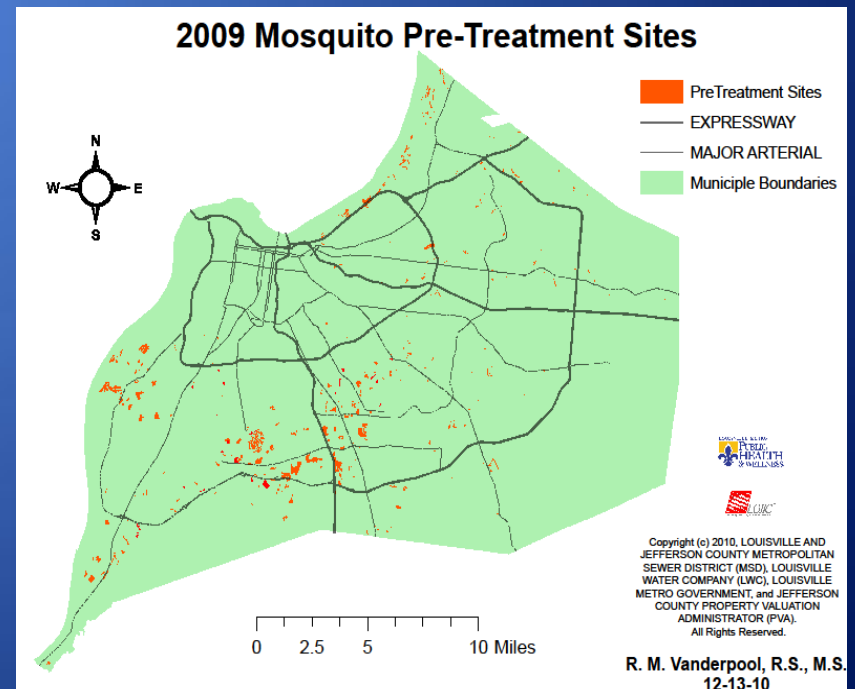
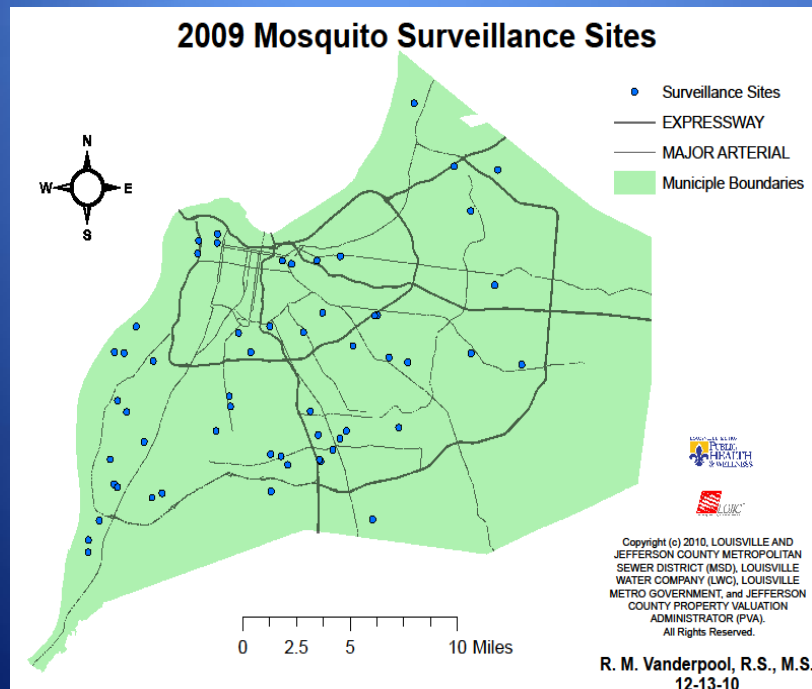
Source: 2009 LMPHW Division of Environmental Health and Protection

Environmental Health, 2009

Mosquito Control: Major functions: Surveillance, source reduction, education, complaint investigation and biological control .

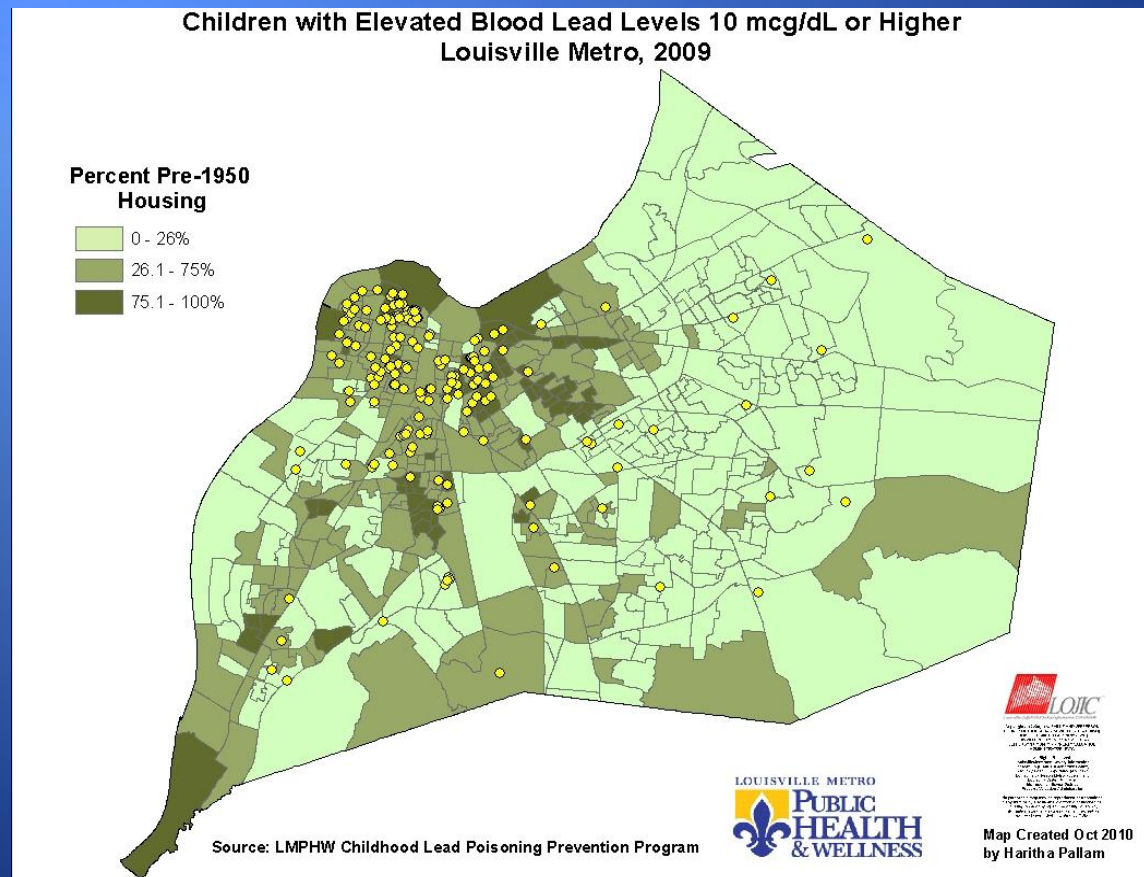
➤ 1195 mosquito related service requests/complaints were received within the MSD combined sewer system 14,500 catch basins were identified that provide excellent breeding habitat for disease vector mosquitoes

Arbovirus Surveillance: 133 samples collected and no confirmed cases in Jefferson county. Kentucky had 3 confirmed cases.



Childhood Lead Poisoning, 2009

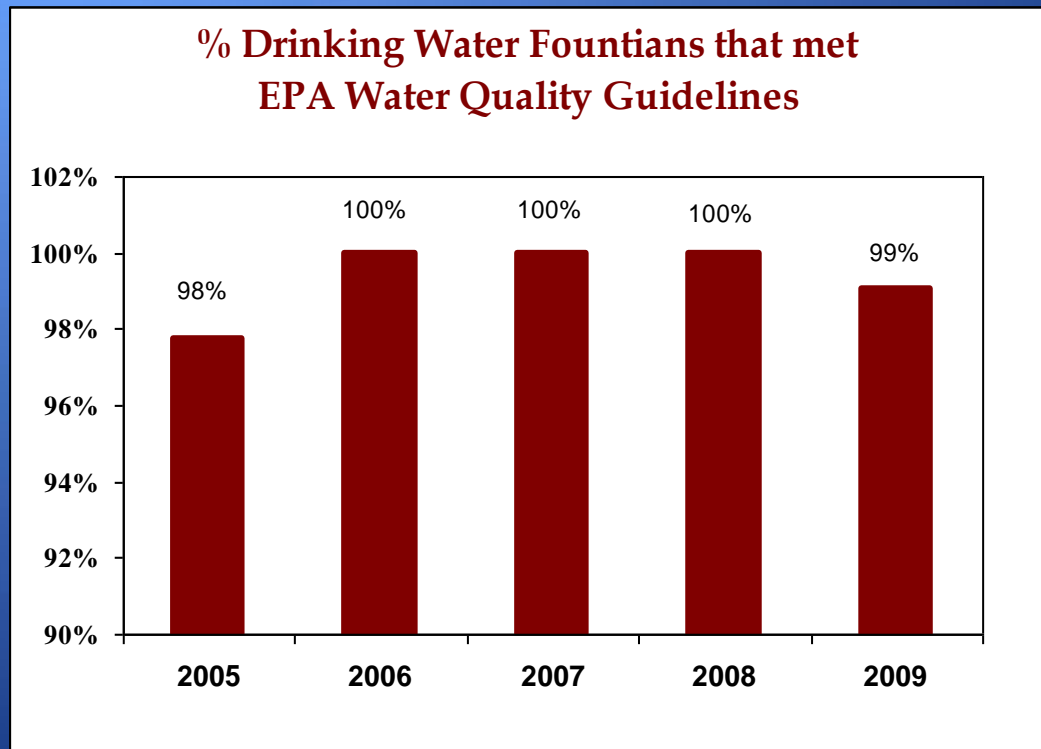
- In 2009, 10,868 Louisville Metro children were screened.
- Children living in poverty are at higher risk for elevated BLLs.
- Blood lead levels have steadily declined among all children over the past years. However, the levels for African American children remain consistently higher.



Source: 2009 LMPHW Childhood Lead Poisoning Prevention Program

Louisville Water Company lead monitoring

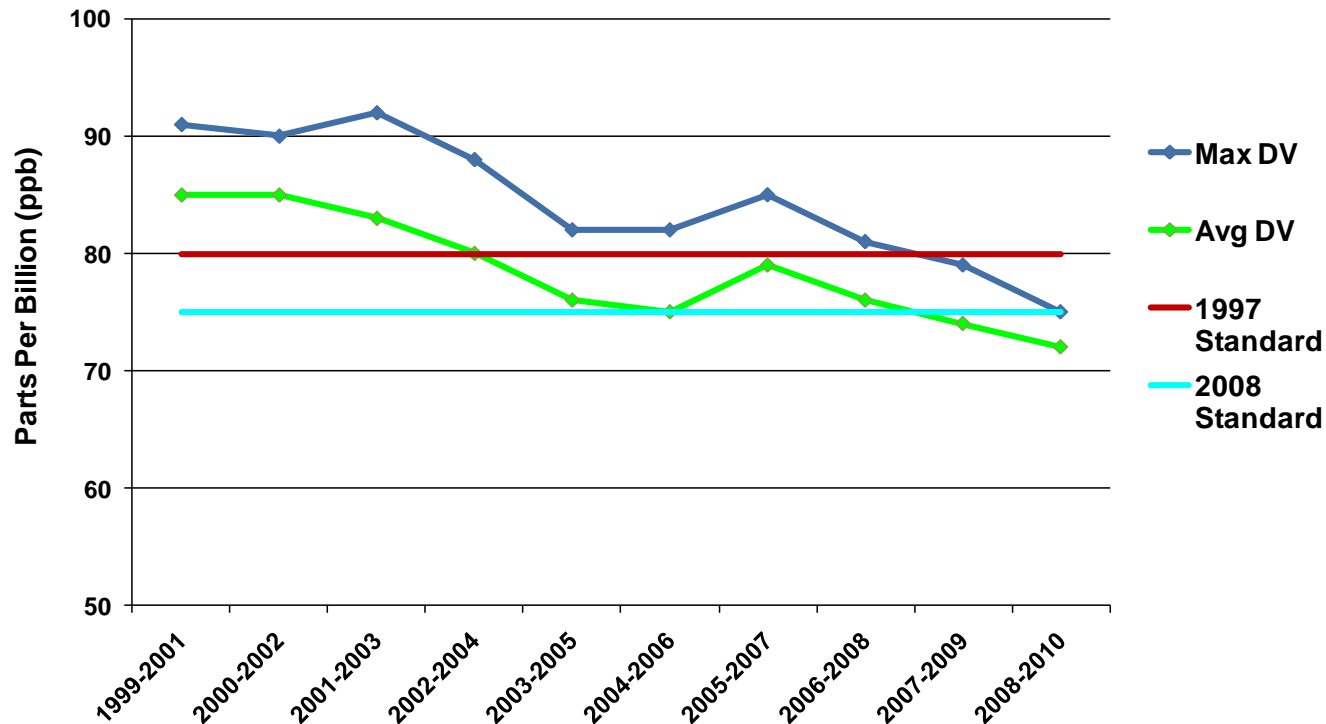
- Monitoring lead levels in drinking water supplied to JCPS, private schools and public fountains, etc.
- 290,000 water services in the distribution system; about 19,700 are lead.
- Line replacement and rehabilitation program for changing the lead lines by 2020.



Source: Lead Monitoring program, Louisville Metro Water Company

Air Pollution Control, 2009

Louisville Metro 8-Hour Ozone Design Values
1999-2010



*A design value is a statistic that describes the air quality status of a given area relative to the level of the National Ambient Air Quality Standards (NAAQS).

Source: 2009 Louisville Metro Air Pollution Control District (APCD)

Data Details and Limitations

- ◆ LM BRFSS: 2008
- ◆ Collision Data: 2009
- ◆ Communicable Diseases: 2008
 - ◆ Most current information available for Reportable diseases
- ◆ Environmental: 2009
 - ◆ Air Pollution data: 2010
- ◆ Hospital Data: 2009
- ◆ JCPS Data: 2009-10
- ◆ Lead Data: 2009 (Current data available)
- ◆ Vital Statistics Data (Birth and Death):
 - ◆ Official File (closed file): 2006
 - ◆ Data used for 2010 HSAR: 2007 (Preliminary data)

Data Details and Limitations

Data by Geographical Units:

BRFSS: ZIP code, Council district groups

- ◆ Census: Demographics by census tracts, block, etc
- ◆ Collision and Crime Data: Square miles
- ◆ Communicable Diseases: Some reportable diseases only
- ◆ Environmental: Census block level
- ◆ Hospital Data: Zip code
- ◆ JCPS Data: BMI: Census tracts
- ◆ Lead Data: Neighborhoods
- ◆ Vital Statistics Data (Birth and Death): Zip code, Census tracts

Acknowledgements

Cabinet for Health and Family Services:

Department of Vital Statistics

Department of Public Health

Department of Education

Office of Health Policy

Louisville Metro Department of Public Health and Wellness:

Office of Policy Planning and Evaluation

Division of Environmental Health and Protection

Louisville Air Pollution Control District (APCD)

Louisville Water Company

Louisville Metro Police Department (LMPD)

Jefferson County Public School District (JCPS)